

Quantitative Reasoning

The cost price of 59 notebooks is selling price of 50 notebooks. Then the profit percentage is

- A) 13.333 %
 - B) 20 %
 - C) 9 %
 - D) 18 %
-

The scale of a map is given as 5 cm: 60 km. Two cities are 4 cm apart on the map. What is the actual distance between the cities?

- A) 40 km
 - B) 70 km
 - C) 48 km
 - D) 30 km
-

A bus started at City A at 7:00 AM and reached City B at 9:30 AM. If the bus does not stop in between and is travelling at 60 kmph speed on average, find the approximate distance between City A and City B.

- A) 120 km
 - B) 230 km
 - C) 150 km
 - D) 60 km
-

Aisha gave one-fourth of her money to Balu. Then, Balu gave one-third of what he got from Aisha to John. If Aisha has Rs. 45 left now, how much did John get?

- A) 4.5
 - B) 5
 - C) 15
 - D) 6
-

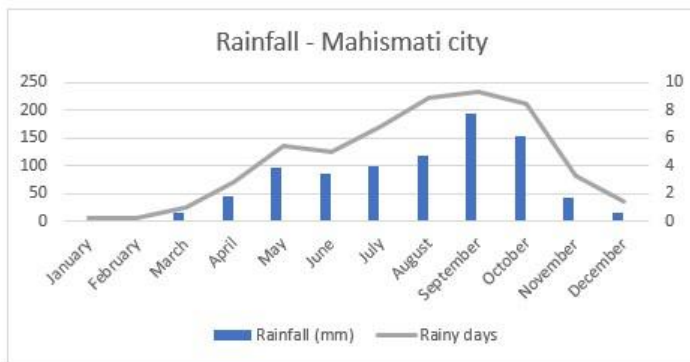
The average age of Anu and Binu is 20. If their ages are in the ratio Anu: Binu = 3:2, then the age of Anu is

- A) 24 years
 - B) 12 years
 - C) 8 years
 - D) 30 years
-

Arjun alone can paint a house in 12 days and Ram alone can paint the house in 24 days. How many days does it take for them to paint the house together?

- A) 12 days
 - B) 10 days
 - C) 6 days
 - D) 8 days
-

The following graph shows the information on average rainfall in Mahismati city over last 25 years. Among the following statements find the true one.



- A) On an average the city receives more rain in April than in August.
 - B) On an average it rains more often in May than in June.
 - C) On an average December is the driest month.
 - D) On an average October is the wettest month.
-

Order the following numbers in increasing order:

$$-\frac{2}{3}, \frac{3}{2}, -\frac{1}{3}, \frac{2}{3}$$

- A) $-\frac{2}{3} < -\frac{1}{3} < \frac{2}{3} < \frac{3}{2}$
 - B) $-\frac{1}{3} < -\frac{2}{3} < \frac{2}{3} < \frac{3}{2}$
 - C) $-\frac{2}{3} < -\frac{1}{3} < \frac{3}{2} < \frac{2}{3}$
 - D) $-\frac{1}{3} < -\frac{2}{3} < \frac{3}{2} < \frac{2}{3}$
-

A and B are two numbers. A is 20% more than C and B is 50% more than C. The ratio of the numbers (A: B) is

- A) 4:5
 - B) 5:2
 - C) 3:4
 - D) 2:5
-

If today is Sunday, what day would it be after 25 days?

- A) Sunday
 - B) Tuesday
 - C) Thursday
 - D) Saturday
-

The price of 2 kilograms of apples is the same as 5 kilograms of bananas. You have enough money to buy 30 kilograms of bananas. How many kilograms of apples can you buy?

- A) 60
 - B) 15
 - C) 10
 - D) 12
-

The areas of two circles are 100 square meters and 25 square meters respectively. Then the ratio of the circumference of the larger circle to the circumference of the smaller circle is

- A) 5:2
 - B) 4:1
 - C) Need to know the value of π to find the answer
 - D) 2:1
-

Mr. X claims, "nobody in this class knows more history than me." What should you do to prove him wrong?

- A) Find at least one person who knows more history than Mr. X.
 - B) Demonstrate that Mr. X has no knowledge in history.
 - C) Demonstrate that everyone knows more history than Mr. X.
 - D) Give Mr. X a test on history.
-

There are 30 students in class. Find which among the following is always true.

- A) There are at least two students whose name start with the alphabet A.
 - B) There are at least two students whose name start with the same alphabet.
 - C) There are at most two students whose name start with the alphabet A.
 - D) There are at most two students whose name start with the same alphabet.
-

What percentage of a minute is a second?

- A) 0.60 %
 - B) 1.67 %
 - C) 0.24 %
 - D) 2.5 %
-

How many people must be there in a room to guarantee that at least 3 of them were born in the same month?

- A) 25
 - B) 36
 - C) 37
 - D) 93
-

The number of multiples of 4 between 10 and 250 is

- A) 59
 - B) 60
 - C) 63
 - D) None of the above
-

“There is a tree in this campus all of whose leaves are green”

If the above statement is false, then

- A) Every tree in this campus has at least one leaf that is not green.
 - B) There is a tree in this campus which has at least one leaf that is not green.
 - C) There is a tree in this campus all of whose leaves are not green.
 - D) Every leaf in each tree in this campus is not green.
-

If A and B are sets such that $A \cup B = A \cap B$, then

- A) A is empty set
 - B) B is empty set
 - C) $A = B$
 - D) None of the above.
-

The average age of three girls is 15. If their ages are in ratio 3 : 5 : 7, then the age of the youngest girl is

- A) 9 years
 - B) 12 years
 - C) 15 years
 - D) 18 years
-

The rail route from Bangalore to Delhi is 2380 km long. If the average speed of Rajdhani express is 70 km/hr how many hours would it take to complete the journey from Bangalore to Delhi?

- A) 33
 - B) 34
 - C) 24
 - D) 37
-

The sides of a triangle are in the ratio 2 : 5 : 8. The triangle is

- A) Acute angled
 - B) Right angled
 - C) Obtuse angled
 - D) Such a triangle is impossible
-

If the speed of sound is 343 m/s, how many kilometers can it travel in an hour?

- A) 343 km
 - B) 1234.5 km
 - C) 1234.8 km
 - D) 95.28 km
-

The area of the largest triangle that can be inscribed in a semicircle of radius 3 is

- A) 9 sq. units
 - B) $\frac{\pi}{2} \times 9$ sq. units
 - C) 18 sq. units
 - D) $\frac{9}{2}$ sq. units
-

27) In an examination 80% of the students passed in mathematics and 85% of the students passed in English. If 73% of the students passed on both subjects, then what percentage of the students failed in both subjects?

- A) 8%
 - B) 27%
 - C) 12%
 - D) 15%
-

The average of the first 95 natural numbers is

- A) 95
 - B) 47.5
 - C) 48
 - D) 49
-

If 35% of X is 25% of Y and 50% of Y is 72% of Z, then

- A) $Y > Z > X$
 - B) $Y > X = Z$
 - C) $Y > X > Z$
 - D) $X > Y > Z$
-

The unit digit of 234 is 4. What is the unit digit of 2^{12} ?

- A) 2
 - B) 4
 - C) 6
 - D) 8
-

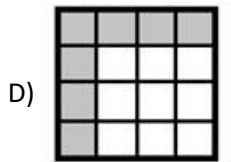
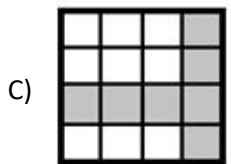
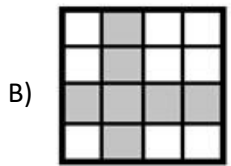
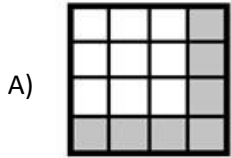
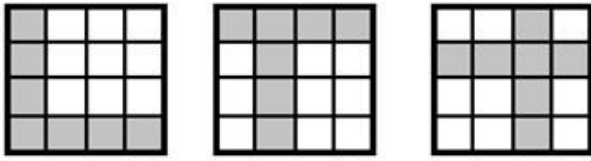
357 is not a multiple of?

- A) 3
 - B) 5
 - C) 17
 - D) 7
-

What decimal of an hour is a second?

- A) 0.0001
 - B) 0.0256
 - C) 0.00012
 - D) 0.00027
-

Which shape comes next in the pattern below?



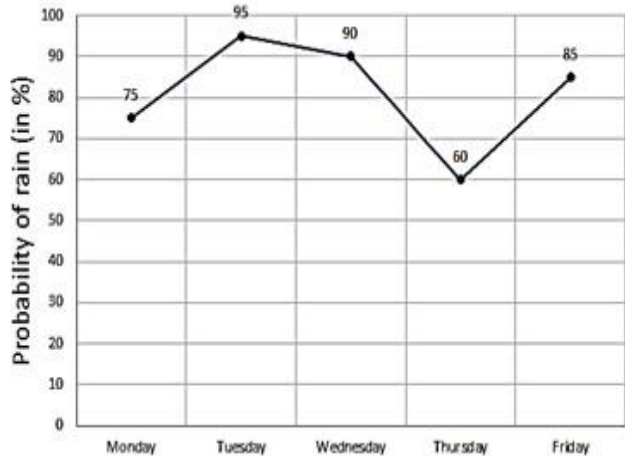
If you have a cardboard square of side 3 cm, and cut out a circle of radius 1 cm, what is the area of the remaining shape (in cm²)?

- A) -2π
- B) $12 - \pi$
- C) $12 - 2\pi$
- D) $9 - \pi$

Suppose $xy = 1$ and $y = 50$. Then x equals

- A) 0.5
- B) 0.2
- C) 0.02
- D) 0.05

The graph below shows the probability of rain in Bangalore for the coming week.



Suppose X is 5% of 30 and Y is 3% of 80. Then

- A) $5X = 3Y$
- B) Y is bigger than X
- C) $3X = 5Y$
- D) X is bigger than Y

A goat needs 2.5 kgs of grass per day. If you have 100 kgs of grass, for how many days can you feed two goats?

- A) 20 days
- B) 25 days
- C) 40 days
- D) 80 days

A and B are two numbers. A is 20% less than C and B is 60% more than C . The ratio of the numbers ($A : B$) is

- A) 1:3
 - B) 2:3
 - C) 3:2
 - D) 1:2
-

Arjun and Ram together can do a piece of work in 6 hours. If Arjun alone can do the work in 15 hours, then how many hours does Ram take to do the work alone?

- A) 12 hours
 - B) 10 hours
 - C) 4.5 hours
 - D) 8 hours
-

The price of 3 kilograms of apples is the same as 5 kilograms of bananas. You have enough money to buy 20 kilograms of bananas. How many kilograms of apples can you buy?

- A) 60
 - B) 15
 - C) 10
 - D) 12
-

The average age of Anu and Binu is 14. If their ages are in the ratio Anu : Binu = 4:3, then the age of Anu is

- A) 7
 - B) 10
 - C) 9
-

Order the following numbers in increasing order:
-1.2, 2.3, -0.4, 0.4

- A) $-1.2 < -0.4 < 2.3 < 0.4$
 - B) $-0.4 < -1.2 < 0.4 < 2.3$
 - C) $-0.4 < -1.2 < 2.3 < 0.4$
 - D) $-1.2 < -0.4 < 0.4 < 2.3$
-

A bus started at Mysuru at 7:00 AM and traveled to Bengaluru. The distance between Mysuru and Bengaluru is 150 km. If the bus does not stop in between and is travelling at 90 kmph speed on average, then the bus should reach Bengaluru

- A) before 8:30 AM
- B) before 9:00 AM
- C) between 9:00 AM and 10:00 AM

D) after 9:30 AM

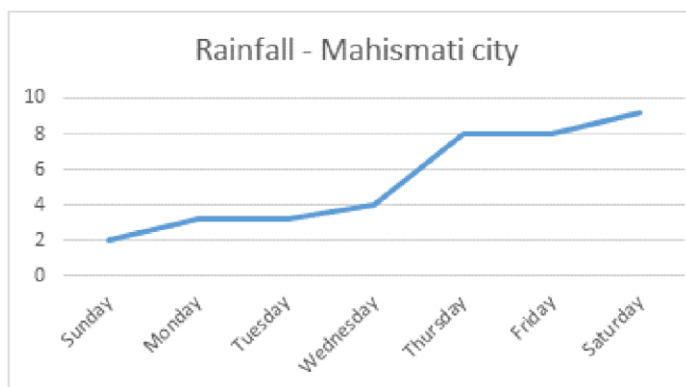
The scale of a map is given as 3 cm: 60 km. Two cities are 4.5 cm apart on the map. What is the actual distance between the cities?

- A) 70 km
 - B) 80 km
 - C) 90 km
 - D) 100 km
-

The scale of a map is given as 3 cm: 60 km. Two cities are 4.5 cm apart on the map. What is the actual distance between the cities?

- A) 70 km
 - B) 80 km
 - C) 90 km
 - D) 100 km
-

The following graph shows the cumulative rainfall (in mm) received during a week in Mahismati city. The readings are taken at the end of the day. Find the amount of rainfall on Thursday.



- A) 4 mm
 - B) 0 mm
 - C) 8 mm
 - D) 3.2 mm
-

There are 22 students in class. Find which among the following is always true.

- A) There are at least four students who are born on the same day of the week.
 - B) There are at least four students who are born on Sunday.
 - C) There are at most four students who are born on the same day of the week.
 - D) There are at most four students who are born on Sunday.
-

If the side length of square A is 3 times larger than the side length of square B , then how many times larger is the area of square A compared to that of square B ?

- A) $\frac{1}{3}$ times
 - B) $\frac{1}{9}$ times
 - C) 9 times
 - D) 3 times
-

The cost price of 10 bags of tomatoes is the selling price of 12 bags of tomatoes. Then the loss percentage is

- A) 10 %
 - B) 6 %
 - C) 12 %
 - D) 16.67 %
-

When asked to evaluate his first 100 days in office, the president of a country said, "I have done more than any president." If he is wrong, then which among the following is correct.

- A) Every president performed better than him in the first 100 days.
 - B) There was at least one president who performed better than him in the first 100 days.
 - C) His performance was poor in the first 100 days.
 - D) No president performed better than him in the first 100 days.
-

If the time now is 1:00 PM, what time is it 20 hours from now?

- A) 9:00 PM
 - B) 4:00 AM
 - C) 9:00 AM
 - D) 8:00 AM
-

What percentage of an hour is a minute?

- A) 0.60 %
 - B) 1.67 %
 - C) 0.24 %
 - D) 2.5 %
-

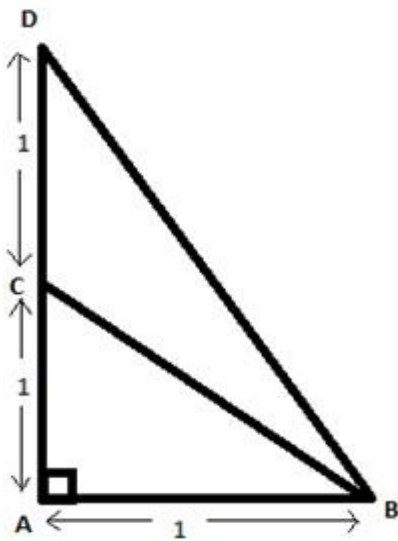
Suppose X is 4% of 30 and Y is 2% of 70. Then

- A) $4X=2Y$
 - B) X is bigger than Y
 - C) $2X = 4Y$
 - D) Y is bigger than X
-

The average of the numbers 5, -6, X and Y is 5. Which of the following has to be true?

- A) $X = 7, Y = 9$
 - B) X and Y must lie in between -6 and 5
 - C) $X+Y=21$
 - D) Both X and Y must be positive
-

In the figure below, which of the following is true?



- A) We do not have enough information to compare the areas of triangles ABC and CBD
 - B) The area of triangle ABC is larger than the area of triangle CBD
 - C) The area of triangle ABC is smaller than the area of triangle CBD
 - D) The area of triangle ABC equals the area of triangle CBD
-

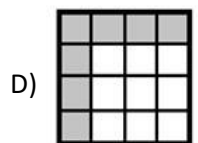
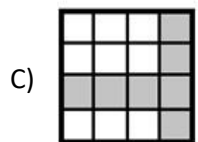
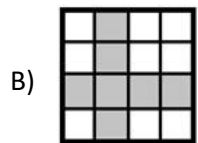
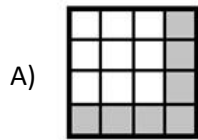
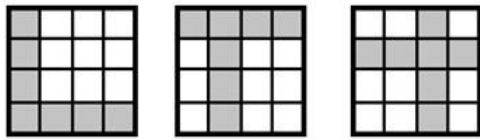
A goat needs 2.5 kg of grass per day. If you have 200 kg of grass, for how many days can you feed two goats?

- A) 20 days
 - B) 40 days
 - C) 50 days
 - D) 100 days
-

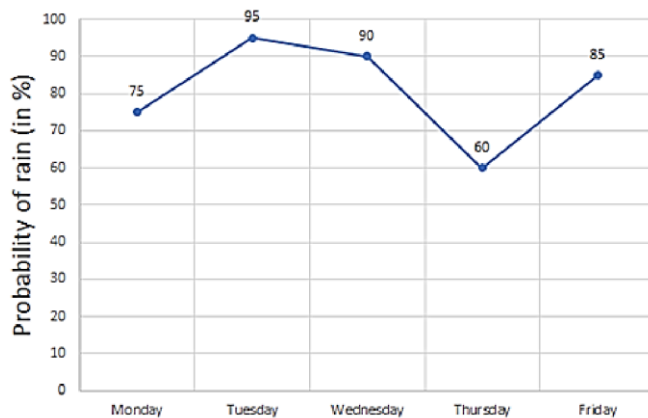
P is a smaller number than Q. If you subtract 2 from Q, you get R. Which of the following is true?

- A) P is bigger than R
 - B) R is bigger than P
 - C) Q is smaller than R
 - D) We cannot say which of P and R is bigger
-

Which shape comes next in the pattern below?



The graph below shows the probability of rain in Bangalore for the coming week.



Which of the following is true?

- A) If it does not rain on Tuesday, it will not rain on Thursday
- B) If it does not rain on Tuesday, it has to rain on Wednesday
- C) It will definitely rain some time during the week
- D) It is possible that there will be no rain on both Thursday and Friday

A shopkeeper has 40 kg of white rice and 20 kg of red rice. 6% of the white rice and 3% of the red rice are spoilt. All together, what percentage of the rice is spoilt?

- A) 5%
 - B) 4.5%
 - C) 9%
 - D) 3%
-

The following table shows the cost of travelling in a bus for various distances.

D = Distance (In Kms)	2	4	6	8	10	12	14
F = Bus Fare (in Rs.)	6	8	10	10	12	12	15

Which of the following is correct?

- A) $F = 2D$
 - B) $F \geq 2D$
 - C) $F \leq 2D$
 - D) None of the above formulas is true.
-

An oval bicycle track is 1 km long and the total distance for the race is 9.5 km. Cyclist 1 is going at an average speed of 15 km/hr and Cyclist 2 is going at an average speed of 30 km/hr.

- A) Cyclist 2 will never meet Cyclist 1
 - B) The two cyclists will meet exactly once
 - C) The two cyclists will meet nine times
 - D) The two cyclists will meet four times
-

Which of the following is correct?

- A) $5/40 > 4/30$ and $4/30 < 3/20$
 - B) $5/40 > 4/30 > 3/20$
 - C) $3/20 > 4/30 > 5/40$
 - D) $5/40 = 4/30 = 3/20$
-

If you have a cardboard circle of radius 3 cm, and cut out a square of side 1 cm, what is the area of the remaining shape?

- A) $6\pi - 4$
- B) $3\pi - 1$
- C) $9\pi - 1$

D) $6\pi - 1$

You have to choose a password consisting of three whole numbers between 0 and 9. You are allowed to repeat digits, but the order of the digits matters. You also cannot choose a password in which all three digits are the same (like 111 or 222) or one that begins with 0 (like 012). How many options do you have?

- A) Over 10,000
 - B) Between 1000 and 9,999
 - C) Between 500 and 999
 - D) Fewer than 499
-

Suppose $xy = 1$ and $y = 20$. Then x equals

- A) 0.05
 - B) 0.2
 - C) 0.02
 - D) 0.5
-

In a class with 50 students, 26 are taking biology and 25 are taking maths. Which of the following is true?

- A) No more than one student is taking both biology and maths
 - B) At least one student is taking both biology and maths
 - C) Exactly one student is taking both biology and maths
 - D) This situation is not possible
-

A manufacturing company had 280 sales outlets across the country in the year 2019. It closed down 70 outlets by the year 2021. The percentage of outlets closed down during the years 2019-2021 is

- a) 25%
 - b) 20%
 - c) 75%
 - d) 33.33%
-

Madikeri and Mysuru are 120 kms away. A car started from Mysuru at 10 AM towards Madikeri and travelled at a speed varying between 40kmph and 60kmph. If the car did not stop during the travel, then the car reached

- a) before 11 AM
 - b) between 12 noon and 1 PM
 - c) between 11 AM and 12 noon
 - d) after 1 PM
-

Two sides of a rectangle are in the ratio 1:2 and their perimeter is 84 units. Then the smallest of the two sides measures

- a) 12 units

- b) 14 units
 - c) 18 units
 - d) 24 units
-

A shopkeeper sells a mobile phone at a profit of 35%. The cost price of the mobile phone is Rs. 4000. What is the price at which the phone was sold?

- a) Rs 1400
 - b) Rs 5000
 - c) Rs 5400
 - d) Rs 5350
-

A quiz has ten questions with 3 points awarded for each correct answer, 1 mark deducted for each wrong answer, and 0 for each question omitted. Madhu scored 22 points. How many questions did she omit?

- a) 0
 - b) 1
 - c) 2
 - d) 3
-

The following table lists the year of birth and year of death of a few prime ministers of India.

Name	Year of birth	Year of death
Jawaharlal Nehru	1889	1964
Lal Bahadur Shastri	1904	1966
Indira Gandhi	1917	1984
Morarji Desai	1896	1995

Which of the following is the arrangement of names in the increasing (ascending) order of numbers of years they lived?

- a) Lal Bahadur Shastri, Indira Gandhi, Jawaharlal Nehru, Morarji Desai.
 - b) Jawaharlal Nehru, Lal Bahadur Shastri, Indira Gandhi, Morarji Desai.
 - c) Jawaharlal Nehru, Morarji Desai, Lal Bahadur Shastri, Indira Gandhi.
 - d) Indira Gandhi, Lal Bahadur Shastri, Morarji Desai, Jawaharlal Nehru.
-

It takes 20 minutes to fully charge (100%) a mobile phone from 0%. Assume that the charging happens at a uniform rate. How much is the phone's battery charged (in percentage) if it requires 5 more minutes of charging to the full battery?

- a) 20%
 - b) 25%
 - c) 75%
 - d) 80%
-

Suman buys 64 packets of pencils each having 25 pencils. He decides to sell these pencils as packets of 8 pencils each. Then how many packets will he need to prepare?

- a) 100
 - b) 150
 - c) 250
 - d) 200
-

Meena borrowed a loan of Rs. 1,200 with simple interest for as many years as the rate of interest. If the interest she paid at the end of the loan period is Rs 432, then what was the rate of interest per annum?

- a) 3.6%
 - b) 4.5%
 - c) 6%
 - d) 5%
-

The areas of the two squares are 100 square meters and 64 square meters respectively. What is the ratio of the sides of the larger square to the side of the smaller square?

- a) 5:2
 - b) 4:3
 - c) 5:4
 - d) 1:2
-

A certain university has only first-year and second-year students. Every student lives either in hostels on campus or in houses just outside campus. All the students living in the campus hostels are first-year students. Every student who lives in the houses outside campus has a pet dog.

Based only on the above information, which of the following statements **must** be true?

- a) Some students who live in the houses outside campus do not have pet dogs.
 - b) All second-year students have pet dogs.
 - c) No first-year student lives in the houses outside campus.
 - d) Some second-year students live in the hostels on campus.
-

In a certain language, "da" either means "yes" or "no", but you do not know which. "Ja" means the opposite of "da". You ask a speaker of the language the question, "Does 'da' mean 'no'?" Assuming she understood your question and answers truthfully, what will her response be?

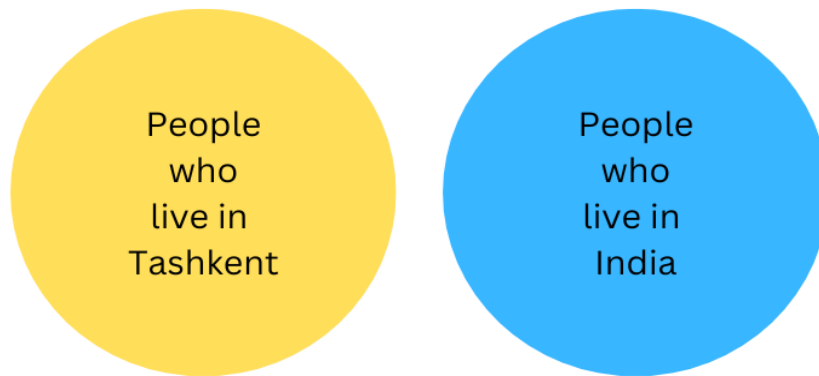
- a) Da
 - b) Ja
 - c) Neither "da" nor "ja"
 - d) Not enough information to determine the answer
-

In a certain city, 80% of the residents can speak Kannada, 50% can speak Hindi and 40% can speak English. 80% of the residents who can speak Hindi can also speak English.

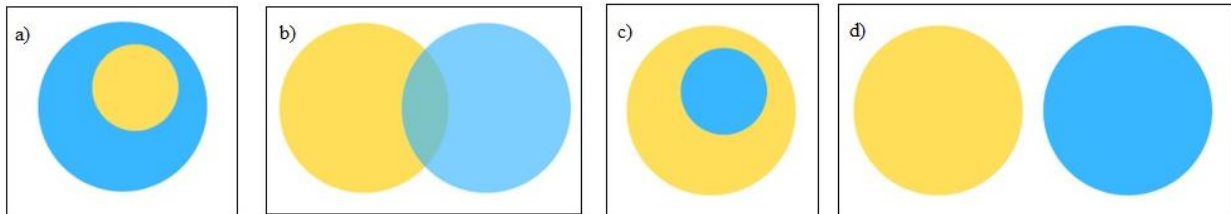
Which of the following statements must be true?

- a) Some residents of the city can speak all three languages.
 - b) Every resident of the city can speak all three languages.
 - c) More than 20% of the city's residents can speak neither Kannada nor English.
 - d) The majority of the city's residents can speak two or more languages.
-

Tashkent is the capital city of the country Uzbekistan. We will use a blue circle to stand for all the people who live in India, and a yellow circle to stand for all the people who live in Tashkent.



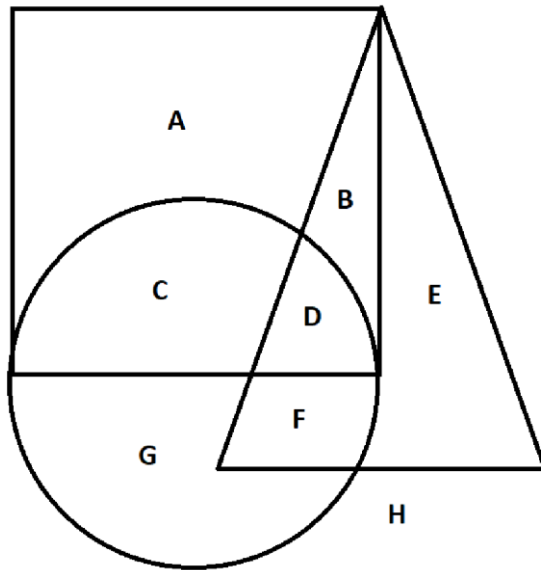
Which of the following pictures best shows the relationship between these two circles?



We will use a triangle to stand for all houses that have a balcony. We will use a square to stand for all houses with more than one bedroom. We will use a circle to stand for all houses that have a garden.



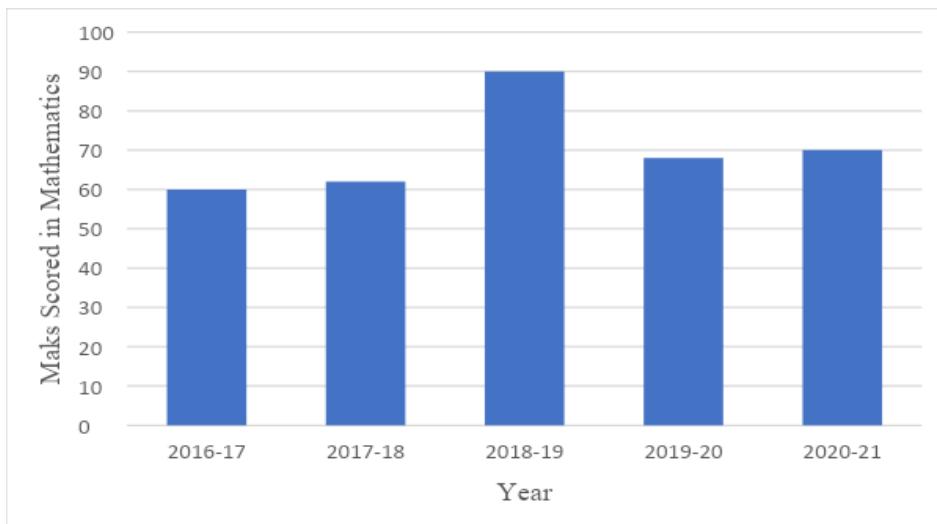
Look at the diagram below, in which different regions have been labelled with different letters.



Saira lives in a house with three bedrooms, no garden and no balcony. In which region of the diagram will we find Saira's house?

- a) H
 - b) E
 - c) A
 - d) D
-

The following graph shows the marks scored by a student over five years in Mathematics.



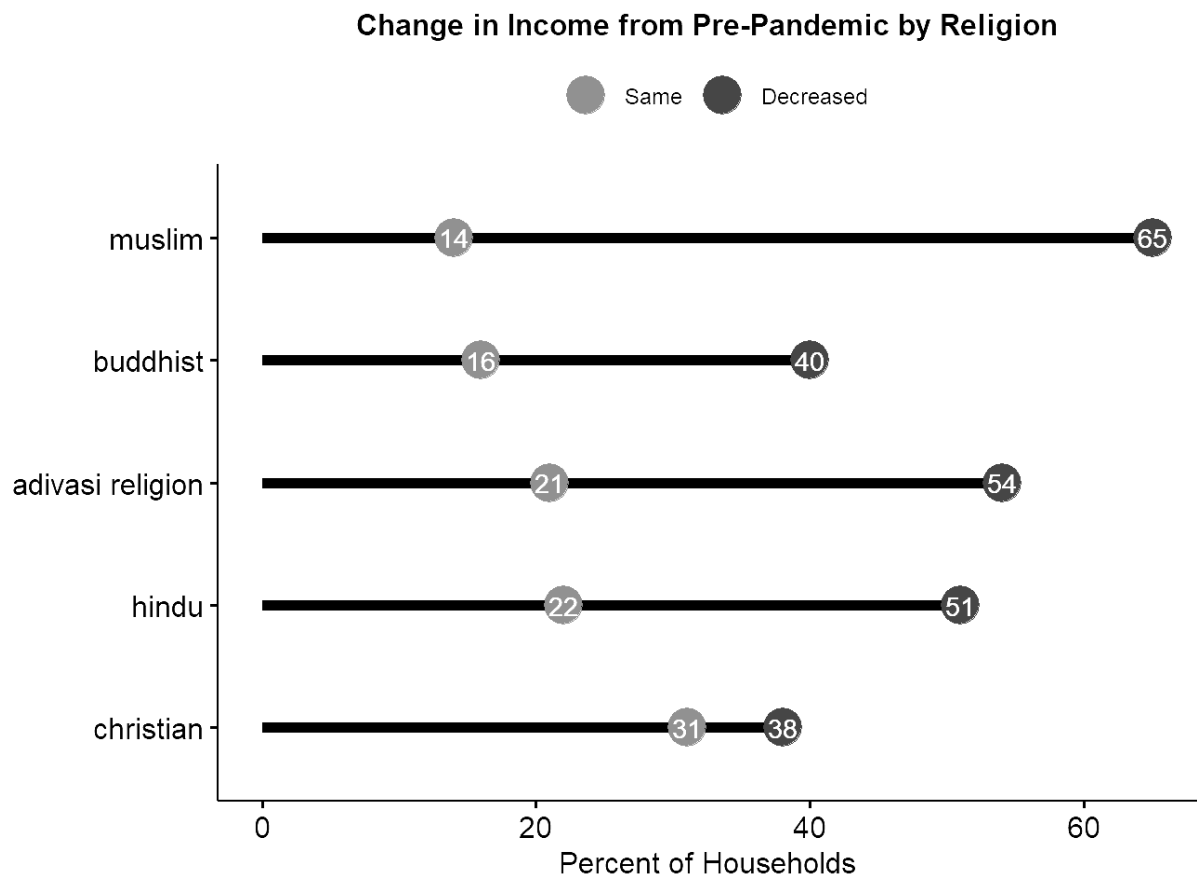
In which year does the student show maximum improvement compared to the previous year?

- a) 2016-17
- b) 2017-18
- c) 2018-19
- d) 2019-20

If the student was in Class 5 (or Standard 5) in 2016-17, and did not fail in any year, then what did the student score in Maths in Class 8?

- a) 70
 - b) 68
 - c) 62
 - d) 60
-

The graph below shows how the income of households belonging to different religions changed after the pandemic compared to the pre-pandemic year. There were 3 possibilities – household income in the year after the pandemic either increased, or decreased, or remained the same compared to the pre-pandemic year. The graph only shows the percentage of households of each religion whose income either decreased or remained the same. What is not shown in the graph is the percentage of households whose incomes increased in the year after the pandemic compared to the pre-pandemic year. The total percentage of households is 100 for each religious category. The vertical axis shows the religion of the households and the horizontal axis shows the percentage of households.



Which religious group of households had the highest percentage of respondents saying that their incomes had reduced post-pandemic compared to pre-pandemic?

- a) Muslim
- b) Hindu
- c) Adivasi religion

d) Buddhist

Among all the depicted religious categories, which religious category had the highest percentage of households saying that their incomes increased in the year after the pandemic compared to the pre-pandemic year.

- a) Muslims
- b) Hindus
- c) Buddhists
- d) Christians

The total number of households surveyed for this data was 6625. If 80% of the households were Hindu, what is the number of Hindu households whose income remained the same?

- a) 2703
 - b) 1431
 - c) 5300
 - d) 1166
-

The angles of a triangle are in the ratio 1:3:5. Then the measure of the greatest of the three angles is

- a) 20°
 - b) 180°
 - c) 100°
 - d) 90°
-

Garima rides her bicycle from home to school. If she rides at a speed of 20 km/hr, she arrives at school 5 minutes late. However, if she rides at a speed of 30 km/hr, she arrives at school 10 minutes early. What is the distance between her home and school?

- a) 15 km
 - b) 20 km
 - c) 25 km
 - d) 30 km
-

Arjun and Ram invested in a piece of land for a total of 2.7 crore rupees, in a ratio of 2:3. After three years, they sold the land for 3.5 crore rupees. How much profit did Arjun make?

- a) 16 lakhs
 - b) 32 lakhs
 - c) 48 lakhs
 - d) 64 lakhs
-

If MADRAS is coded as NBESBT, how is BOMBAY coded (under the same coding scheme)?

- a) CPNCBX
 - b) CPNCBZ
 - c) CPOCBZ
 - d) CQOCBZ
-

Vikram sells goods at the cost price, but he uses a fake weight of 800 grams instead of 1 kg. How much profit does he make?

- a) 2%
 - b) 8%
 - c) 20%
 - d) 25%
-

Three spraying machines, all with the same capacity, can finish painting a house in 60 minutes. How long will it take for five machines of the same capacity to do the same job?

- a) 30 minutes
 - b) 24 minutes
 - c) 36 minutes
 - d) 100 minutes
-

In Metropolis City, the auto-rickshaw fare is fixed at Rs 25 for the first 2 km and Rs 15 for every kilometer thereafter. If an auto-rickshaw driver of the city follows this rule, what is the fare for 10 km?

- a) 250 rupees
 - b) 85 rupees
 - c) 120 rupees
 - d) 145 rupees
-

A train traveling at a speed of 90 km/hr crosses a pole in 7 seconds. What is the length of the train?

- a) 170 meters
 - b) 175 meters
 - c) 182 meters
 - d) 185 meters
-

Swati has some rasagollas with her. She gave two-fifths of her rasagollas to Bella. Then, Bella gave one-fifth of what she got from Swati to Khalid. If Swati had 75 rasagollas initially, how many did Khalid get?

- a) 6
 - b) 25
 - c) 10
 - d) 4
-

The average age of Ajay and Vijay is 33. If their ages are in the ratio Ajay : Vijay = 5:6, then the age of Ajay is

- a) 30 years
 - b) 33 years
 - c) 36 years
 - d) 24 years
-

In a library, there are two types of bookshelves: wooden and metal. Only wooden bookshelves have textbooks. Some books in the library are written by famous authors. All books written by famous authors are kept on metal bookshelves. Based only on the above information, which of the following statements must be true?

- a) Some books on wooden bookshelves are written by famous authors.
 - b) If a book is kept on a metal bookshelf, it is written by a famous author.
 - c) No book written by a famous author is a textbook.
 - d) Some textbooks are kept on metal bookshelves.
-

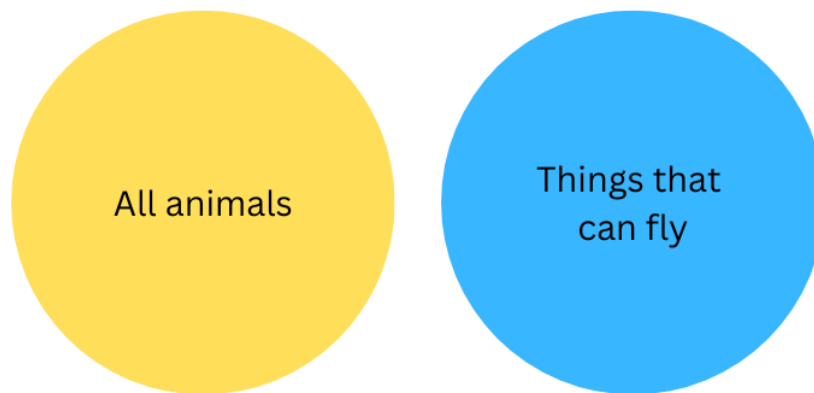
In a certain country, there are only two kinds of people: those who always tell the truth, and those who always lie. Every person either always tells the truth or always lies. Suppose Rajesh and Priya are from that country. Rajesh says: "At least one of us always lies". Based only on the above information, which of the following statements must be true?

- a) Rajesh always tells the truth.
 - b) Priya always tells the truth.
 - c) Rajesh and Priya always lie.
 - d) Not enough information to determine the answer.
-

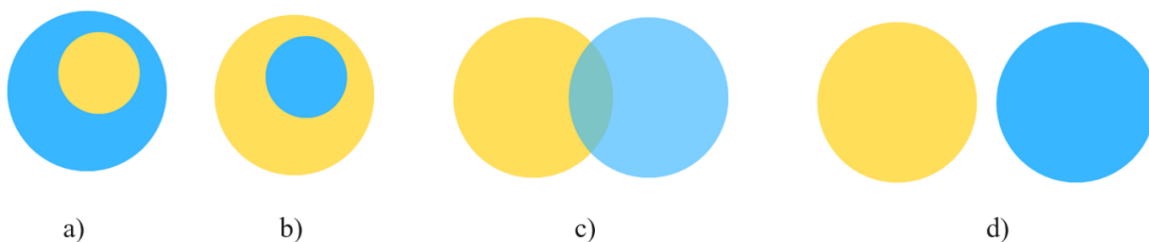
In a certain town, 70% of the residents own a car, 60% own a bicycle, and 50% own a motorcycle. Among those who own a car, 80% also own a bicycle, and among those who own a bicycle, 70% also own a motorcycle. Which of the following statements must be true?

- a) Some residents of the town own all three types of vehicles.
 - b) Every resident of the town owns all three types of vehicles.
 - c) More than 30% of the town's residents own none of the three types of vehicles.
 - d) Less than 50% of the town's residents own two or more types of vehicles.
-

Some things that can fly are birds, bats, airplanes. We'll use a blue circle to represent all things that can fly and a yellow circle to represent all animals.



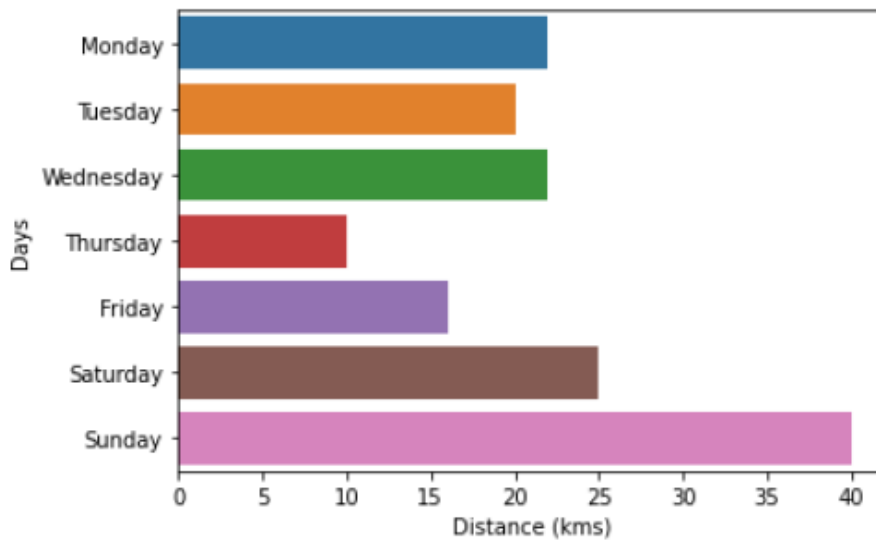
Which of the following pictures best shows the relationship between these two circles?



Ayesha, a student in your class, says: "No one in this class is better than me at maths and sports". Her classmate Pranav disagrees with her statement. Which of the following claims must Pranav believe?

- a) There is someone in the class better than Ayesha at both maths and sports.
 - b) Everyone in the class is better than Ayesha at both maths and sports.
 - c) Everyone in the class is better than Ayesha either at maths or at sports.
 - d) Ayesha is not very good at maths and sports.
-

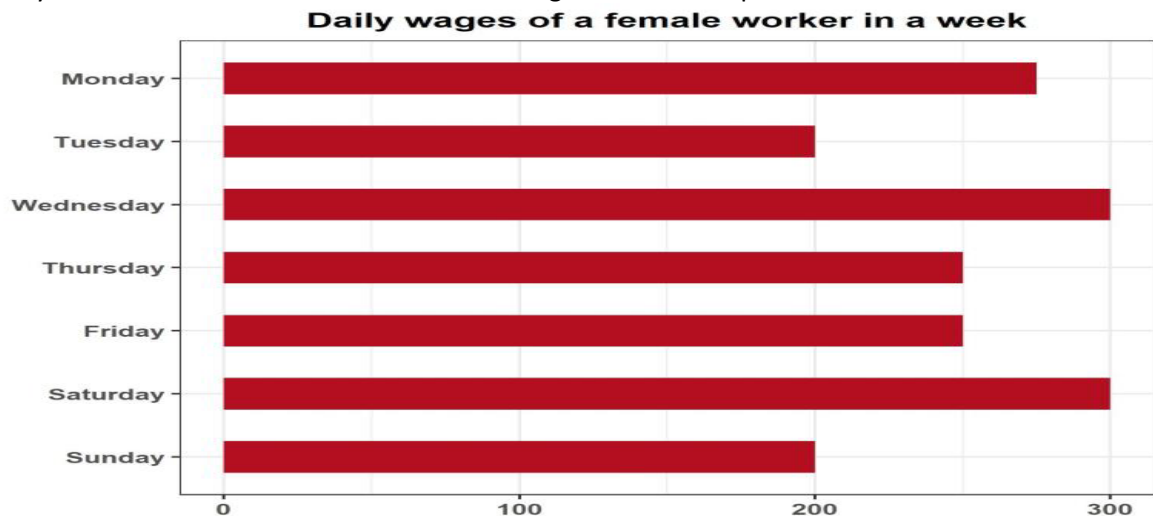
The following graph shows the distance traveled by a cyclist on different days of the week.



Which of the following statements is true?

- a) The cyclist covered the maximum distance on Saturday.
 - b) The cyclist traveled the minimum distance on Friday.
 - c) The cyclist traveled the same distance on Monday and Wednesday.
 - d) The distance traveled on Saturday was twice the distance traveled on Friday.
-

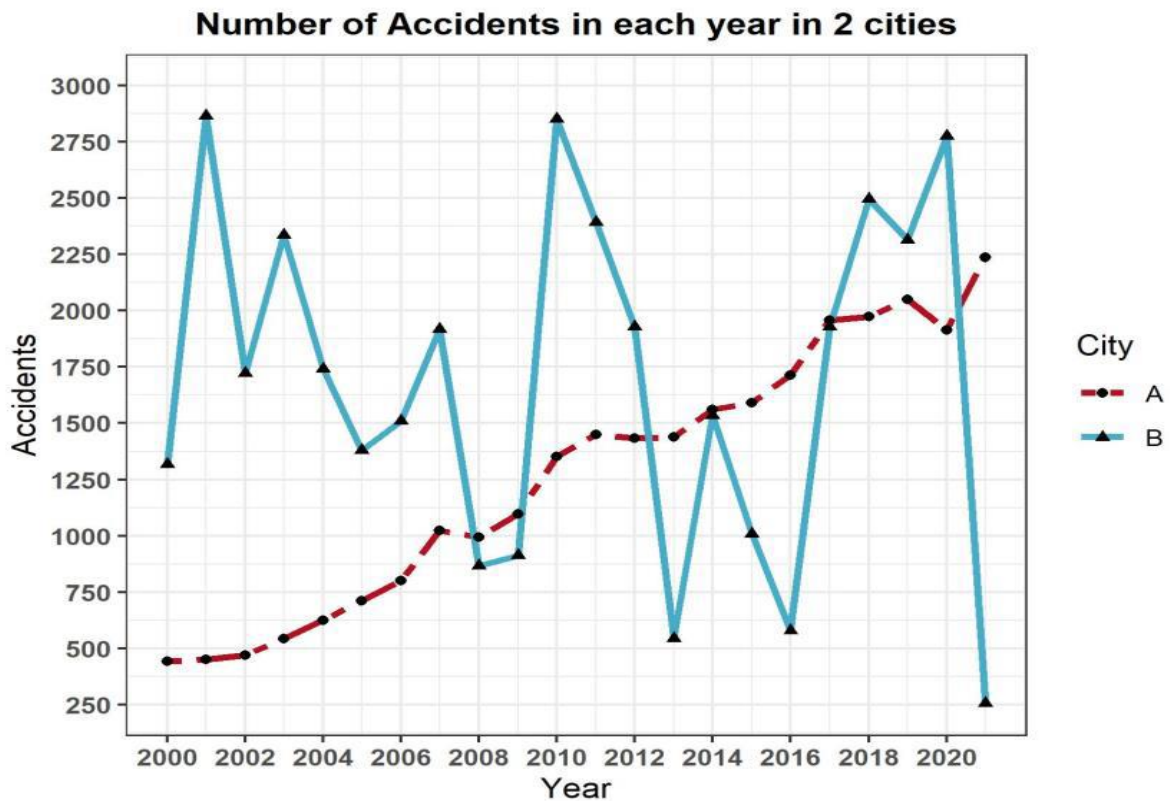
The following graph shows the daily wages earned by a female worker in a particular week in a town. The days of the week are on the X axis and the wages earned in rupees are on the Y axis.



What is the difference between the highest and the lowest wages earned by her in that week?

- a) Rs 50
 - b) Rs 75
 - c) Rs 100
 - d) No difference
-

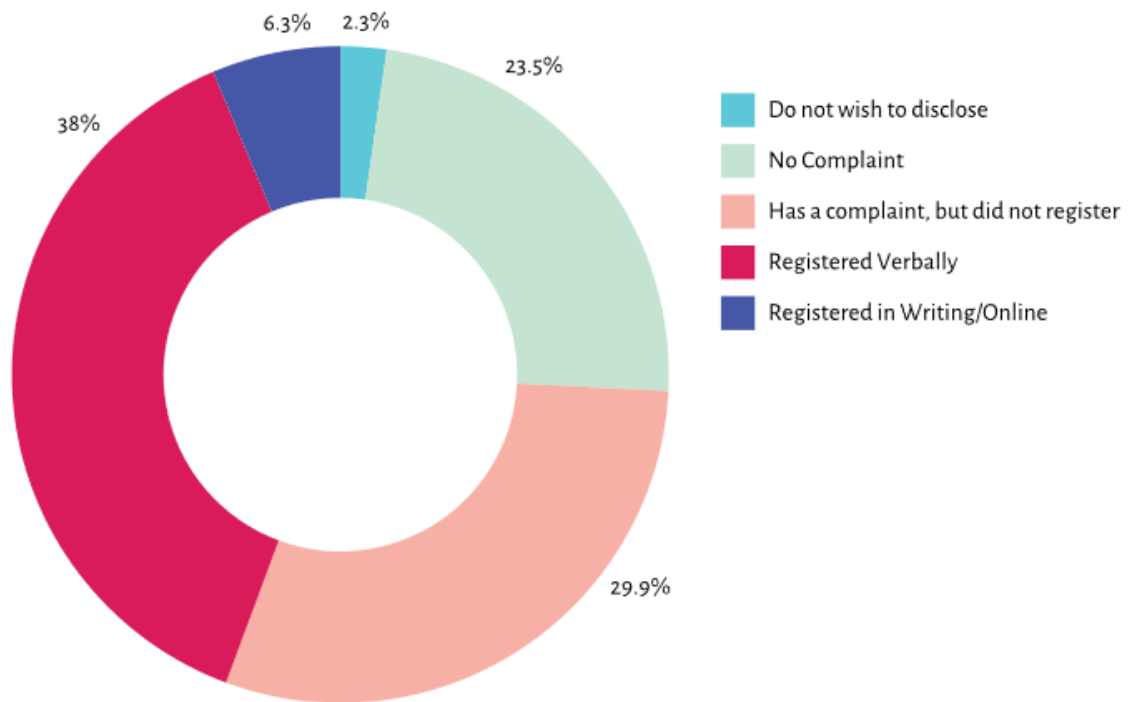
The following graph shows the number of accidents that have happened each year from 2000 to 2021 in two cities, A and B. The X axis shows the year and the Y axis shows the number of accidents in that year.



In which year did city A record its maximum number of accidents?

- a) 2020
 - b) 2001
 - c) 2011
 - d) 2021
-

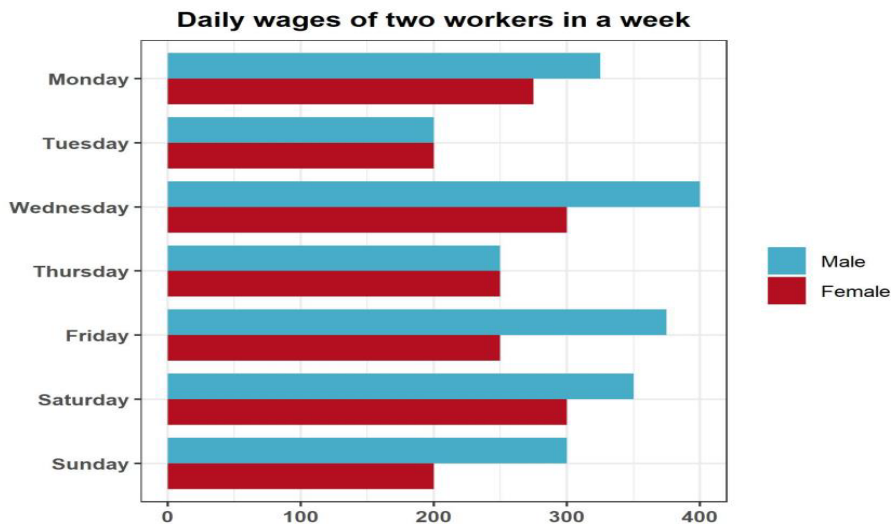
Several school students in a state were asked whether they have any complaints about their school buildings like the condition of the toilets, presence of teachers, etc. The students were also asked if they had registered their complaints officially. Each student had 5 options to choose from. Their responses are depicted in the graph below.



What percentage of students either registered verbally or registered in writing/online?

- a) 67.9%
- b) 44.3%
- c) 38%
- d) 6.3%

The following graph shows the daily wages of 2 workers – one female and one male – in a particular week in a town. The days of the week are shown in the y axis and the wages earned in rupees are shown on the x axis.



Which of the following statements is true?

- a) The female worker has earned less than the male worker every day of the week.
 - b) The female worker has earned the same amount as the male worker everyday of the week.
 - c) The female worker has earned the same as the male worker on 2 days of the week.
 - d) The female worker has earned more than the male worker on 2 days of the week.
-

Tarun and Karan bought an apartment by investing in a ratio of 2:3 respectively. After three years, they sold the same for 3.5 crore rupees and shared the profit (in the same ratio). If Tarun made a profit of 20 lakhs, how much did they buy the land together for?

- a) 3 crores
 - b) 2.5 crores
 - c) 2.8 crores
 - d) 3.2 crores
-

The angles of a triangle are in the ratio 2:3:4. Then the measure of the smallest of the three angles is

- a) 60°
 - b) 40°
 - c) 100°
 - d) 90°
-

Tanvi drives her car from home to the office. If she drives at a speed of 30 km/hr, she arrives at the office 10 minutes late. However, if she drives at a speed of 45 km/hr, she arrives at the office 10 minutes early. How long does it take for her to reach her office if she is driving at 60km/hr from home?

- a) 20 minutes
- b) 15 minutes
- c) 60 minutes
- d) 30 minutes

In a city, the auto-rickshaw fare is fixed at Rs 40 for the first 2 km and Rs 15 for every kilometer thereafter. If an auto-rickshaw driver in the city follows this rule, what is the fare for 8 km?

- a) 90 rupees
- b) 120 rupees
- c) 130 rupees
- d) 150 rupees

The average weight of two sheep in a farm is 33 kg. If their weights are in the ratio 4:7, then the weight of the heavier one is

- a) 30 kg
- b) 24 kg
- c) 36 kg
- d) 42 kg

If CALICUT is coded as ECNKEWV, how is MADURAI coded?

- a) OBFVTBK
- b) OCFWTCK
- c) OZETTZK
- d) LBCVQBH

Shringa has some oranges with her. She gave three-fifths of her oranges to Kanthi. Then, Kanthi gave two-fifths of what she got from Shringa to Kaif. If Kaif got 30 oranges, how many are left with Kanthi finally?

- a) 30

- b) 50
 - c) 45
 - d) 25
-

A firm guarantees a return amount of Rs. 70,000 after a lock in period on an investment of Rs. 50,000. If they are providing simple interest at 8% per annum, then what is the lock-in period?

- a) 2 years
 - b) 5 years
 - c) 4 years
 - d) 8years
-

20 people can build a house in 36 days. The number of people required to build the same house in 24 days is (assuming efficiency of each worker is the same)

- a) 30
 - b) 25
 - c) 35
 - d) 32
-

A train of length 150 meters crosses a pole in 5 seconds. What is the speed of the train?

- a) 100 km/hr
 - b) 120 km/hr
 - c) 112 km/hr
 - d) 108 km/hr
-

In a library, there are only two types of bookshelves: wooden and metal. The library has textbooks and books written by famous authors. Some textbooks are kept on wooden bookshelves. All books written by famous authors are kept on metal bookshelves.

Based only on the above information, which of the following statements **must** be true?

- a) Some books on wooden bookshelves are written by famous authors.
- b) If a book is kept on a metal bookshelf, it is written by a famous author.
- c) No books written by a famous author are textbooks.

d) Some books on metal bookshelves are written by famous authors.

In a certain country, there are only two kinds of people: those who always tell the truth, and those who always lie. Every person either always tells the truth or always lies. Suppose Rajesh and Priya are from that country. Rajesh says: "I always lie and Priya always tells the truth".

Based only on the above information, which of the following statements must be true?

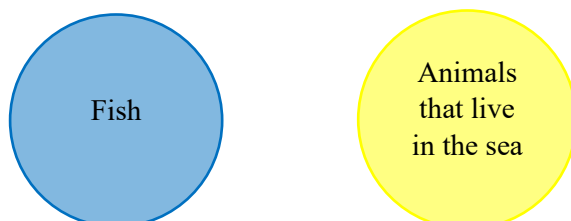
- a) Rajesh always tells the truth.
 - b) Priya always tells the truth.
 - c) Rajesh and Priya always lie.
 - d) Not enough information to determine the answer.
-

In a certain town, 30% of the residents own a car, 70% own a bicycle, and 50% own a motorcycle. Among those who own a car, 80% also own a bicycle, and 70% also own a motorcycle.

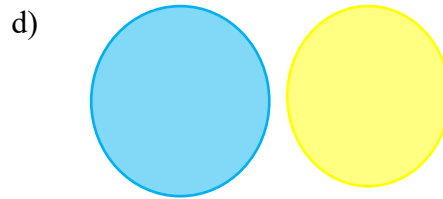
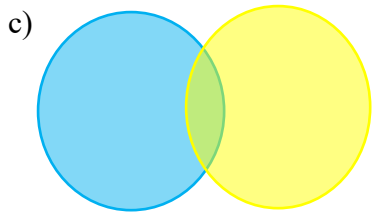
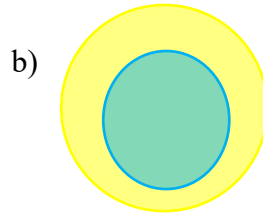
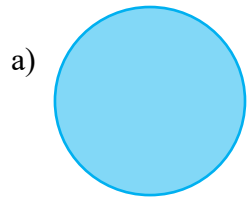
Which of the following statements **must** be true?

- a) No residents of the town own all three types of vehicles.
 - b) Every resident of the town owns all three types of vehicles.
 - c) More than 30% of the town's residents own none of the three types of vehicles.
 - d) The number of residents who own a motorcycle is greater than the number of residents who own both a car and a bicycle.
-

We'll use a blue circle to represent fish and a yellow circle to represent animals that live in the sea.



Which of the following pictures best shows the relationship between these two circles?



Ayesha, a student in your class, says: "No one in this class is better than me at either maths or sports". Her classmate Pranav disagrees with her statement. Which of the following claims must Pranav believe?

- a) Everyone in the class is better than Ayesha at both maths and sports.
 - b) Everyone in the class is better than Ayesha at sports.
 - c) There is someone in the class better than Ayesha either at maths or at sports.
 - d) Ayesha is not very good at maths or sports.
-

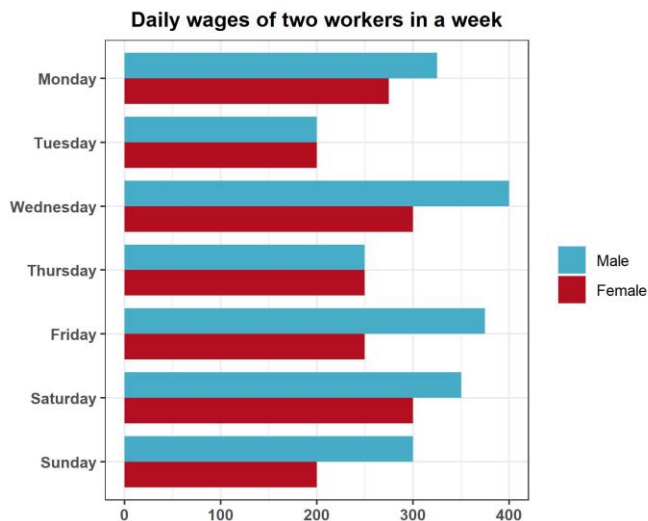
The following graph shows the daily wages earned by a female worker in a particular week in a town. The days of the week are on the y axis and the wages earned in rupees are on the x axis.



Which of the following is true

- a) She earned the least amount on Monday and Saturday
- b) She earned the most amount on Sunday
- c) She earned the least amount on Wednesday
- d) She earned the same amount everyday

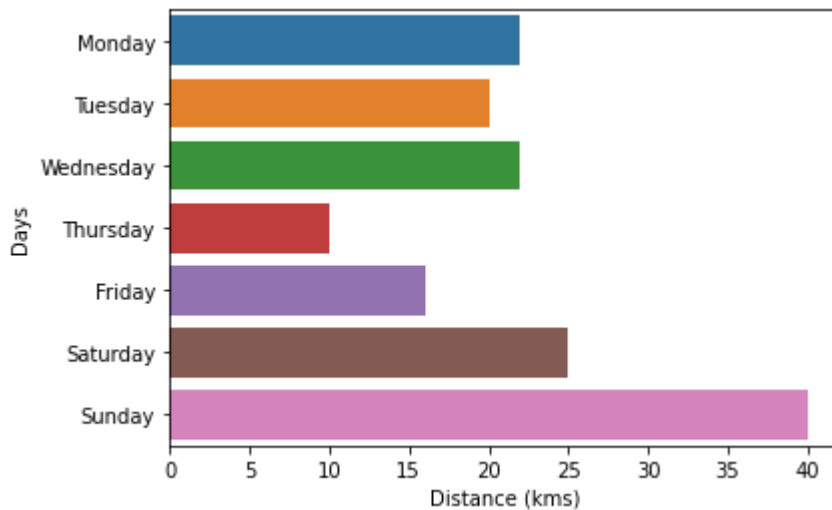
The following graph shows the daily wages of 2 workers – one female and one male – in a particular week in a town. The days of the week are shown in the y axis and the wages earned in rupees are shown on the x axis.



The maximum difference in the wages earned between the male worker and the female worker happened on which day?

- a) Monday
 - b) Wednesday
 - c) Friday
 - d) Sunday
-

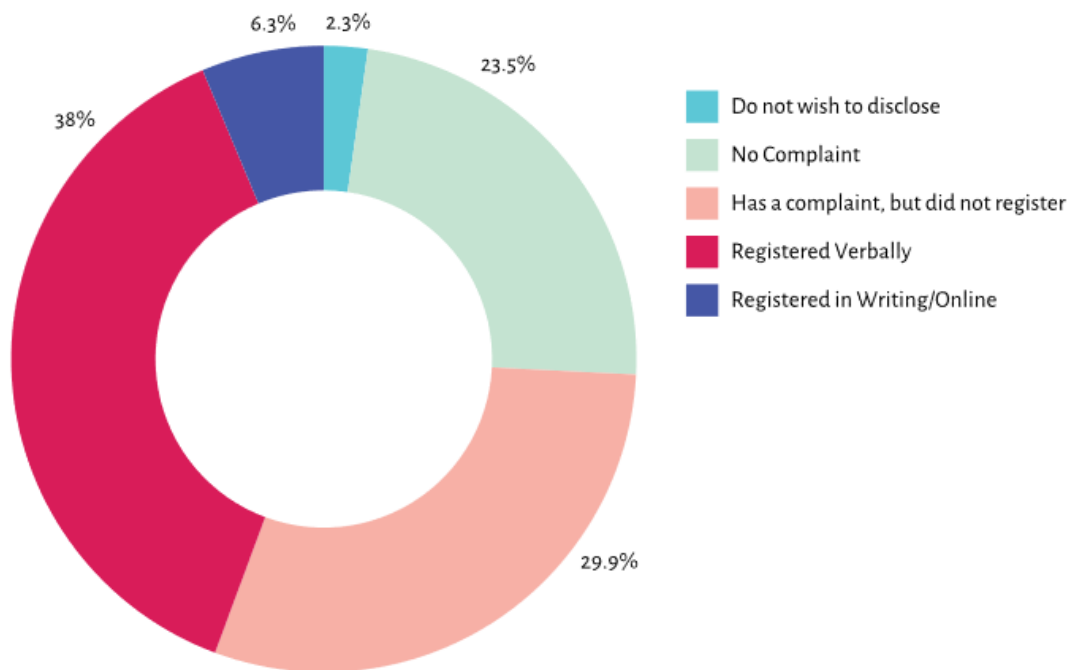
The following graph shows the distance travelled by a cyclist on different days of the week.



What is the difference between the maximum and minimum distances traveled by the cyclist?

- a) 29
 - b) 30
 - c) 31
 - d) 25
-

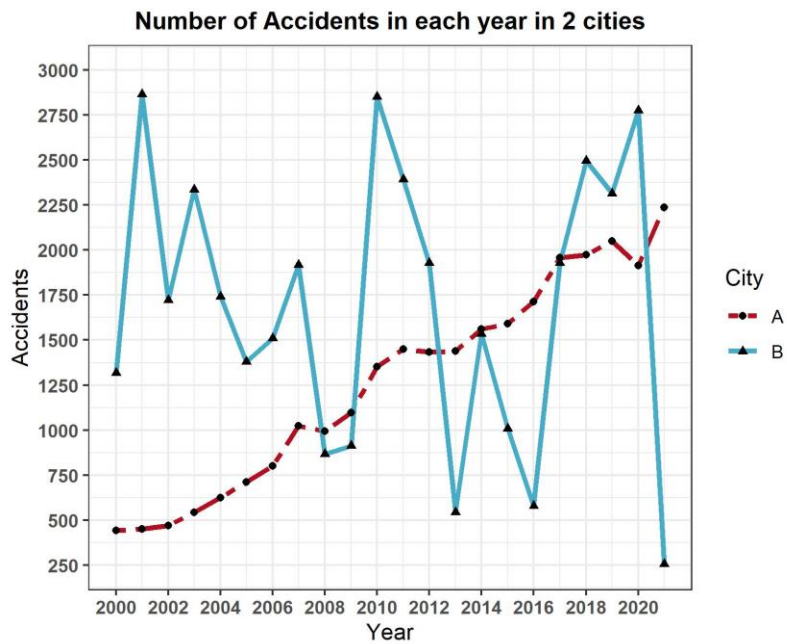
Several school students in a state were asked whether they have any complaints about their school buildings like the condition of the toilets, presence of teachers, etc. The students were also asked if they had registered their complaints officially. Each student had 5 options to choose from. Their responses are depicted in the graph below.



What percentage of students said they had a complaint but did not register?

- a) 29.9%
- b) 38%
- c) 42%
- d) Can't say from the graph.

The following graph shows the number of accidents that have happened each year from 2000 to 2021 in two cities, A and B. The x axis shows the years and the y axis shows the number of accidents.



In which year was the difference in the number of accidents in the two cities the maximum?

- a) 2001
- b) 2021
- c) 2011
- d) 2016

In a library, there are only two types of bookshelves: wooden and metal. All the textbooks are kept on wooden shelves, and no other books are kept on wooden shelves. Some books written by famous authors are not kept on metal shelves. All books are kept on wooden or metal shelves.

Based only on the above information, which of the following statements **must** be true?

- a) Some books on wooden bookshelves are written by famous authors.
- b) If a book is kept on a metal bookshelf, it is written by a famous author.
- c) No books written by a famous author are textbooks.
- d) None of the books on metal bookshelves are written by famous authors.

In a certain country, there are only two kinds of people: those who always tell the truth, and those who always lie. Every person either always tells the truth or always lies. Suppose Rajesh is from that country and says: "Either I always lie or else two plus two equals four".

Based only on the above information, which of the following statements must be true?

- a) Rajesh always tells the truth.
- b) Rajesh always lies.

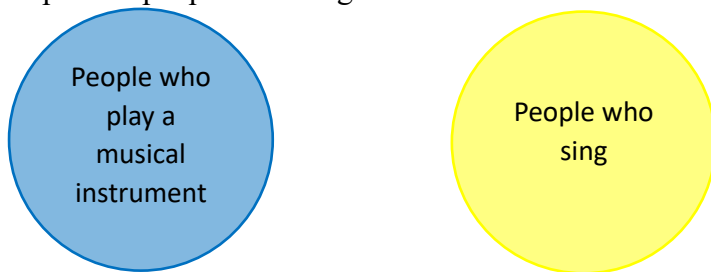
- c) Rajesh always tells the truth and lies.
 - d) Not enough information to determine the answer
-

In a certain town, 30% of the residents own a car, 10% own a bicycle, and 60% own a motorcycle.

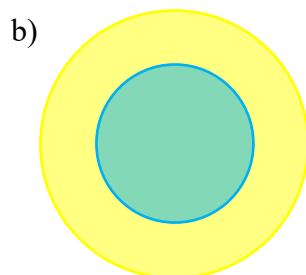
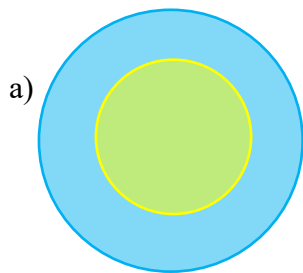
Which of the following statements **must** be true?

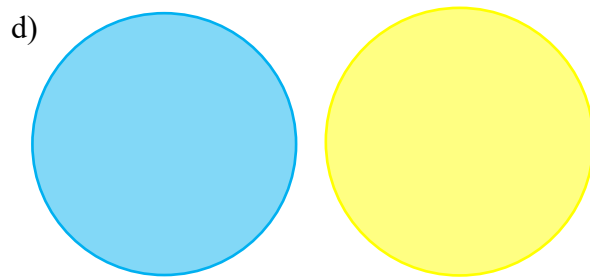
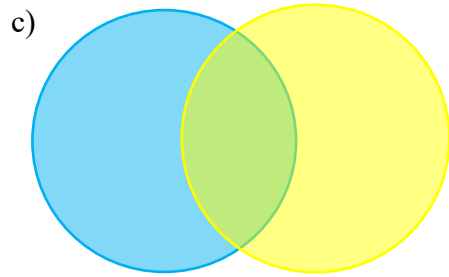
- a) All residents of the town own at least one vehicle.
 - b) 10% of the town's residents own all three types of vehicles.
 - c) The majority of the town's residents own at least one vehicle.
 - d) Some residents of the town own a motorcycle and a bicycle.
-

We'll use a blue circle to represent people who play a musical instrument and a yellow circle to represent people who sing.



Which of the following pictures best shows the relationship between these two circles?

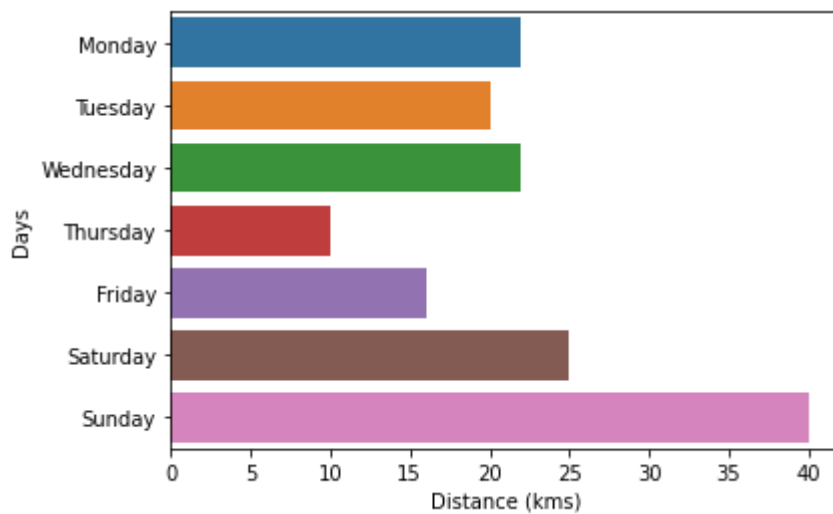




Ayesha, a student in your class, says: "There is at least one person in this class who is better than me at both maths and sports". Her classmate Pranav disagrees with her statement. Which of the following claims must Pranav believe?

- a) No one in the class is better than Ayesha at both maths and sports.
 - b) Everyone in the class is better than Ayesha at both maths and sports.
 - c) No one in the class is better than Ayesha either at maths or at sports.
 - d) Ayesha is not very good at maths and sports.
-

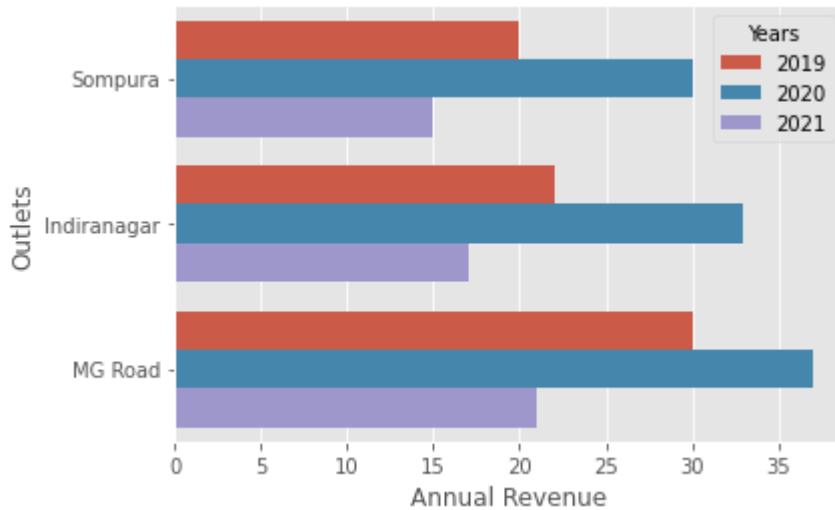
11) The following graph shows the distance traveled by a cyclist on different days of the week.



What is the ratio of the distance covered on Thursday to the distance covered on Sunday?

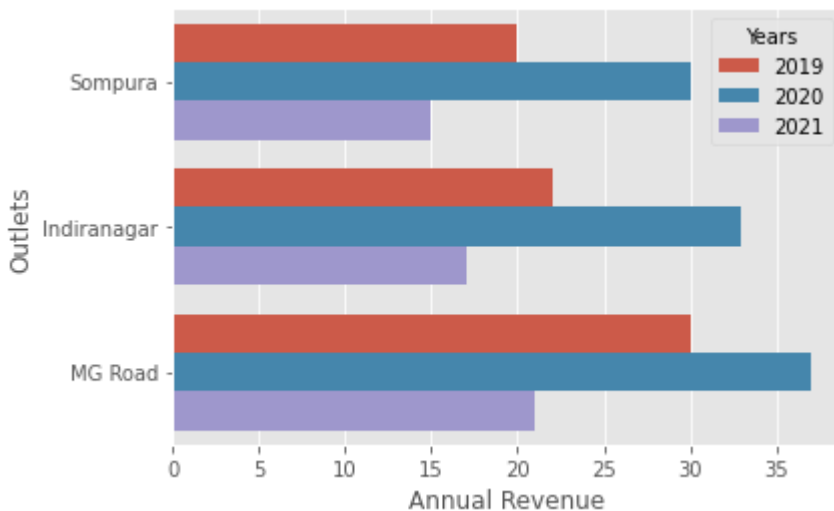
- a) 4:1
- b) 1:4
- c) 1:40
- d) 1:2

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, which outlet had the largest absolute revenue decline between 2019 and 2021?



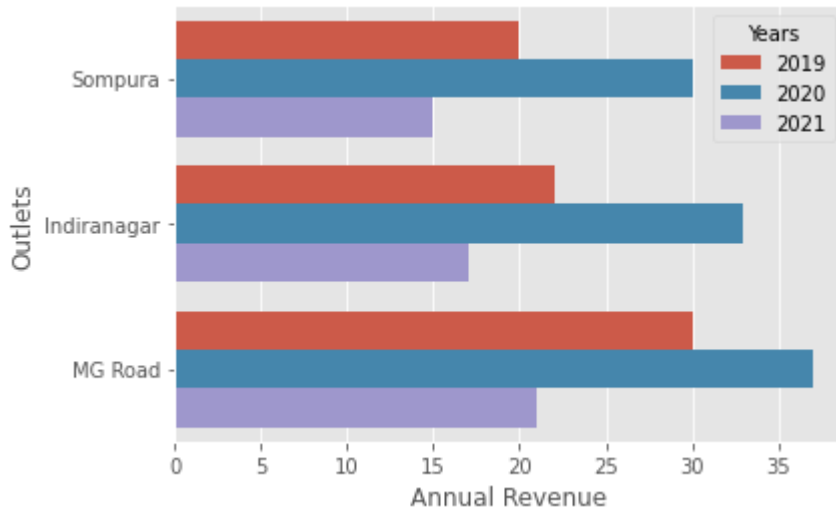
- a) Sompura.
- b) Indiranagar.
- c) MG Road.
- d) Insufficient information to answer the question.

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, which of the following statements is **false**?



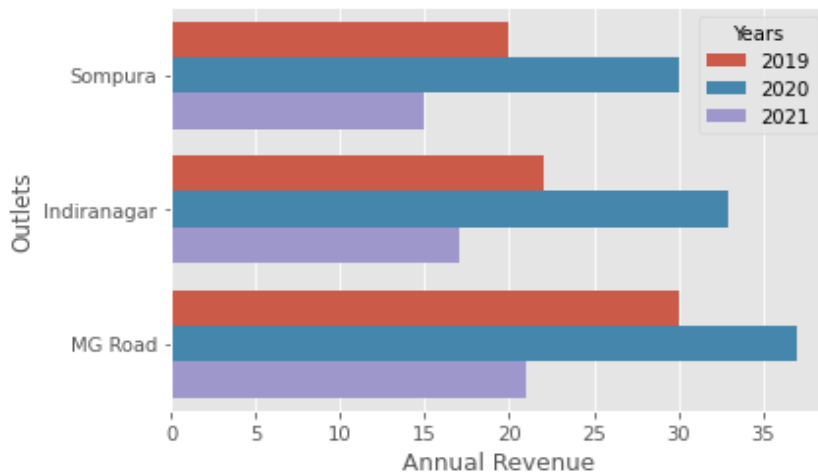
- a) Between 2019 and 2020, revenue increased in all outlets.
 - b) Between 2019 and 2021, revenue declined in all the outlets.
 - c) Sompura outlet was the second best revenue collector in all three years.
 - d) MG Road had the best revenue collection in all three years.
-

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information: Which outlet had the slowest revenue growth rate in 2020?



- a) Sompura.
 - b) Indiranagar.
 - c) MG Road.
 - d) Can't be answered.
-

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, the difference between annual revenues of Sompura and Indiranagar outlets,



- a) Increased between 2019 and 2020.
 - b) Decreased between 2019 and 2020.
 - c) Remained constant between 2019 and 2020.
 - d) None of the above
-

A cricket team won 7 matches out of the total number of matches they played. If the win percentage is 20, then the number of matches they lost in all is

- a) 15
 - b) 14
 - c) 18
 - d) 21
-

The ratio of the sides of two squares is 3:5. If the length of the first square is 18 cm, then find the area of the second square (in square cm) is?

- a) 225
 - b) 400
 - c) 625
 - d) 900
-

The average age of a family of four members is 35 years. If the ages of three members are 48, 45, and 22 years, what is the age of the youngest member?

- a) 18 years
 - b) 20 years
 - c) 22 years
 - d) 25 years
-

A car travelling at 70 km/hr stops after two and a half hours due to a breakdown. If the destination is 45 km away from this location, what is the distance between the starting point and the destination?

- a) 220 km
 - b) 210 km
 - c) 200 km
 - d) 160 km
-

A shopkeeper sold a watch at a profit of 20%. If the cost price was Rs. 2400/- then at what price was the watch sold?

- a) Rs. 2800
 - b) Rs. 2880
 - c) Rs. 3000
 - d) Rs. 3120
-

Machine A takes 12 minutes to print 100 pages. Machine B is twice as efficient as Machine A. Then the time taken to print 200 pages is:

- a) 6 minutes
 - b) 12 minutes
 - c) 18 minutes
 - d) 24 minutes
-

The simple interest on a certain amount of money for 2 years at the rate of 8% per annum is Rs. 1600. What is the principal amount?

- a) Rs. 10000
 - b) Rs. 12000
 - c) Rs. 8000
 - d) Rs. 6000
-

Arrange the square roots of the following numbers in descending order: $3\sqrt{2}$, $\sqrt{9}$, $2\sqrt{6}$, $3\sqrt{5}$.

- a) $3\sqrt{5}$, $2\sqrt{6}$, $3\sqrt{2}$, $\sqrt{9}$
 - b) $3\sqrt{5}$, $3\sqrt{2}$, $2\sqrt{6}$, $\sqrt{9}$
 - c) $3\sqrt{2}$, $3\sqrt{5}$, $2\sqrt{6}$, $\sqrt{9}$
 - d) $3\sqrt{2}$, $2\sqrt{6}$, $3\sqrt{5}$, $\sqrt{9}$
-

If the speed of a bullet train is 240 km/hr then the (approximate) speed in m/s is:

- a) 50
 - b) 67
 - c) 74
 - d) 93
-

A firm guarantees a return amount of Rs. 70,000 on investment of Rs. 50,000 with simple interest of 8% per annum. What is the lock in period?

- a) 2 years
 - b) 5 years
 - c) 3.5 years
 - d) 8 years
-

In a library, there are only two types of bookshelves: wooden and metal. All the textbooks are kept on wooden shelves, and no other books are kept on wooden shelves. Some books written by famous authors are not kept on metal shelves. All books are kept on wooden or metal shelves.

Based only on the above information, which of the following statements **must** be true?

- a) Some books on wooden bookshelves are written by famous authors.
 - b) If a book is kept on a metal bookshelf, it is written by a famous author.
 - c) No books written by a famous author are textbooks.
 - d) None of the books on metal bookshelves are written by famous authors.
-

In a certain country, there are only two kinds of people: those who always tell the truth, and those who always lie. Every person either always tells the truth or always lies. Suppose Rajesh is from that country and says: "Either I always lie or else two plus two equals four".

Based only on the above information, which of the following statements must be true?

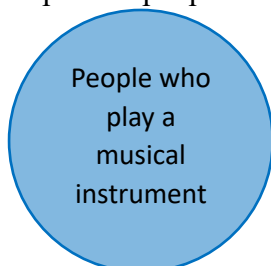
- a) Rajesh always tells the truth.
 - b) Rajesh always lies.
 - c) Rajesh always tells the truth and lies.
 - d) Not enough information to determine the answer
-

In a certain town, 30% of the residents own a car, 10% own a bicycle, and 60% own a motorcycle.

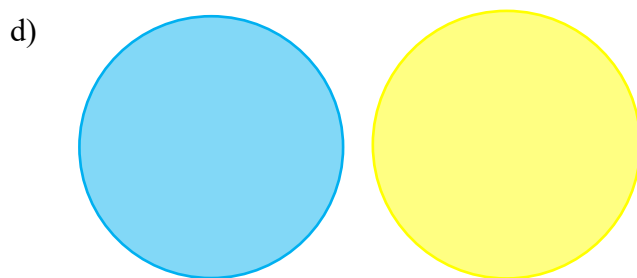
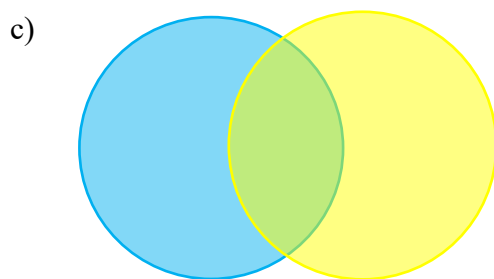
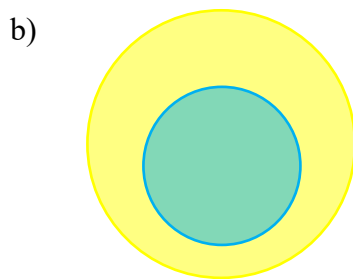
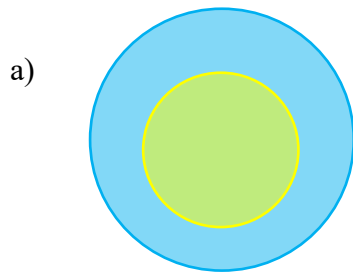
Which of the following statements **must** be true?

- a) All residents of the town own at least one vehicle.
 - b) 10% of the town's residents own all three types of vehicles.
 - c) The majority of the town's residents own at least one vehicle.
 - d) Some residents of the town own a motorcycle and a bicycle.
-

We'll use a blue circle to represent people who play a musical instrument and a yellow circle to represent people who sing.



Which of the following pictures best shows the relationship between these two circles?

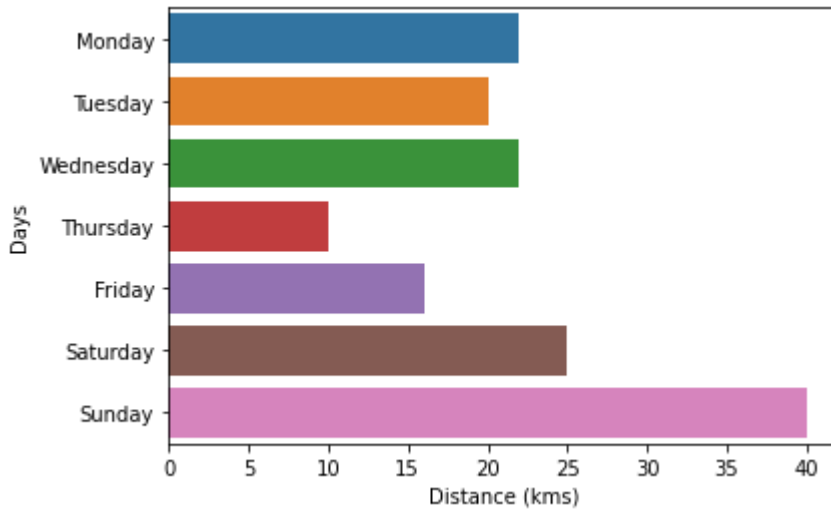


Ayesha, a student in your class, says: "There is at least one person in this class who is better than me at both maths and sports". Her classmate Pranav disagrees with her statement. Which of the following claims must Pranav believe?

- a) No one in the class is better than Ayesha at both maths and sports.
- b) Everyone in the class is better than Ayesha at both maths and sports.
- c) No one in the class is better than Ayesha either at maths or at sports.

d) Ayesha is not very good at maths and sports

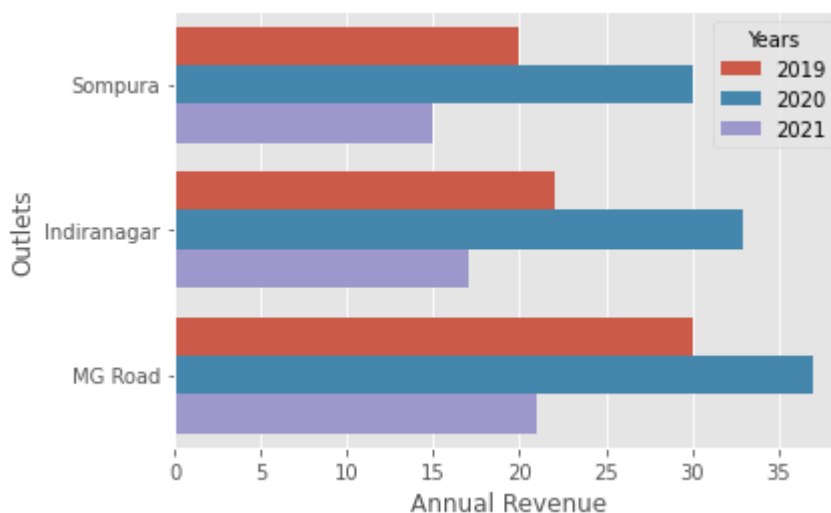
The following graph shows the distance traveled by a cyclist on different days of the week.



What is the ratio of the distance covered on Thursday to the distance covered on Sunday?

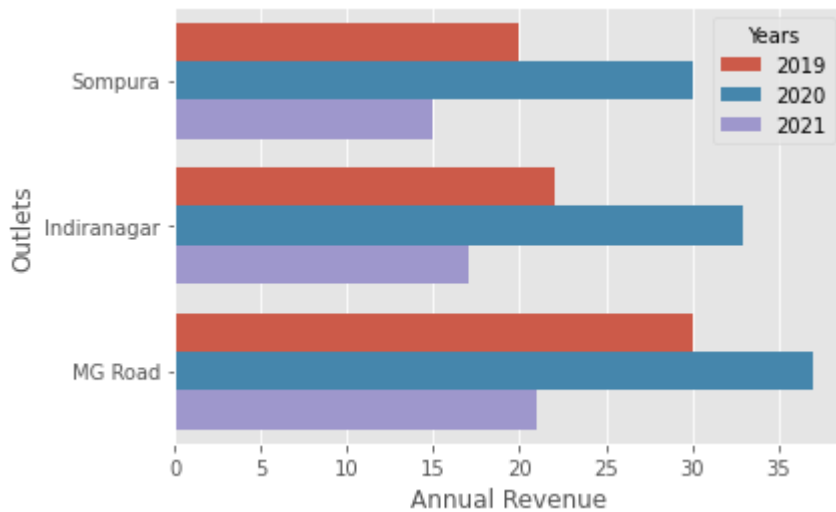
- a) 4:1
 - b) 1:4
 - c) 1:40
 - d) 1:2
-

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, which outlet had the largest absolute revenue decline between 2019 and 2021?



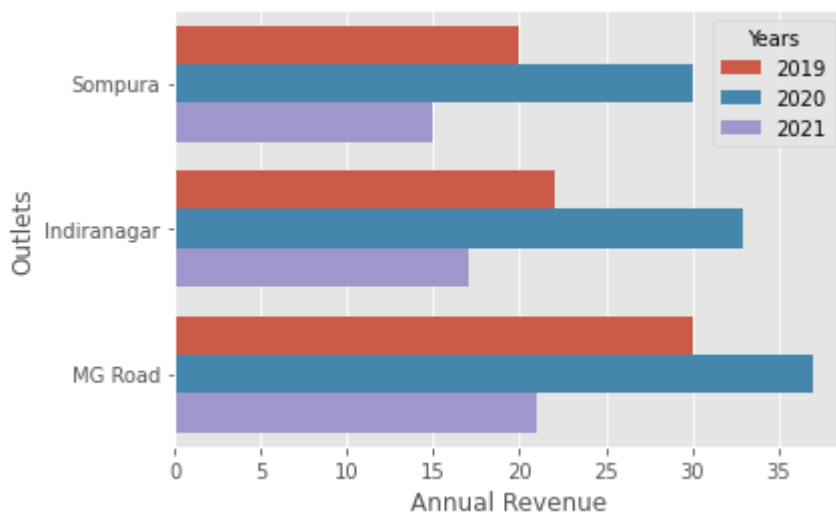
- a) Sompura.
 - b) Indiranagar.
 - c) MG Road.
 - d) Insufficient information to answer the question.
-

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, which of the following statements is **false**?

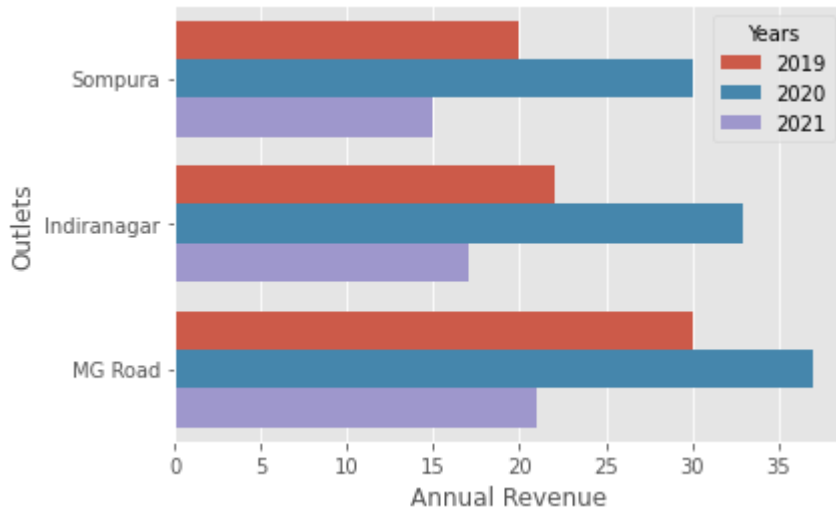


- a) Between 2019 and 2020, revenue increased in all outlets.
- b) Between 2019 and 2021, revenue declined in all the outlets.
- c) Sompura outlet was the second best revenue collector in all three years.
- d) MG Road had the best revenue collection in all three years.

The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information: Which outlet had the slowest revenue growth rate in 2020?



- a) Sompura.
 - b) Indiranagar.
 - c) MG Road.
 - d) Can't be answered.
- a) The following graph contains information about the annual revenue of three outlets of a restaurant chain for two years. Based on this information, the difference between annual revenues of Sompura and Indiranagar outlets,



- a) Increased between 2019 and 2020.
 - b) Decreased between 2019 and 2020.
 - c) Remained constant between 2019 and 2020.
 - d) None of the above
-

A cricket team won 7 matches out of the total number of matches they played. If the win percentage is 20, then the number of matches they lost in all is

- a) 15
 - b) 14
 - c) 18
 - d) 21
-

The ratio of the sides of two squares is 3:5. If the length of the first square is 18 cm, then find the area of the second square (in square cm) is?

- a) 225
 - b) 400
 - c) 625
 - d) 900
-

The average age of a family of four members is 35 years. If the ages of three members are 48, 45, and 22 years, what is the age of the youngest member?

- a) 18 years
 - b) 20 years
 - c) 22 years
 - d) 25 years
-

A car travelling at 70 km/hr stops after two and a half hours due to a breakdown. If the destination is 45 km away from this location, what is the distance between the starting point and the destination?

- a) 220 km
- b) 210 km

- c) 200 km
 - d) 160 km
-

A shopkeeper sold a watch at a profit of 20%. If the cost price was Rs. 2400/- then at what price was the watch sold?

- a) Rs. 2800
 - b) Rs. 2880
 - c) Rs. 3000
 - d) Rs. 3120
-

Machine A takes 12 minutes to print 100 pages. Machine B is twice as efficient as Machine A. Then the time taken to print 200 pages is:

- a) 6 minutes
 - b) 12 minutes
 - c) 18 minutes
 - d) 24 minutes
-

The simple interest on a certain amount of money for 2 years at the rate of 8% per annum is Rs. 1600. What is the principal amount?

- a) Rs. 10000
 - b) Rs. 12000
 - c) Rs. 8000
 - d) Rs. 6000
-

Arrange the square roots of the following numbers in descending order: $3\sqrt{2}$, $\sqrt{9}$, $2\sqrt{6}$, $3\sqrt{5}$.

- a) $3\sqrt{5}$, $2\sqrt{6}$, $3\sqrt{2}$, $\sqrt{9}$
 - b) $3\sqrt{5}$, $3\sqrt{2}$, $2\sqrt{6}$, $\sqrt{9}$
 - c) $3\sqrt{2}$, $3\sqrt{5}$, $2\sqrt{6}$, $\sqrt{9}$
 - d) $3\sqrt{2}$, $2\sqrt{6}$, $3\sqrt{5}$, $\sqrt{9}$
-

If the speed of a bullet train is 240 km/hr then the (approximate) speed in m/s is:

- a) 50
 - b) 67
 - c) 74
 - d) 93
-

A firm guarantees a return amount of Rs. 70,000 on investment of Rs. 50,000 with simple interest of 8% per annum. What is the lock in period?

- a) 2 years

- b) 5 years
 - c) 3.5 years
 - d) 8 years
-

India has 1.5 million engineers. As per a recent report, 67% of them fear job loss due to Artificial Intelligence. Approximately how many engineers are fearing job loss as per the above information?

- a) 1.2 million
 - b) 12 lakh
 - c) 1 lakh
 - d) 10 lakh
-

At the 1983 Open National Championships in Jamshedpur, Indian athlete PT Usha broke the 200 metres national record clocking 23.9 seconds and set a new national record in 400 metres race with 53.6 seconds. From this information, what was her best speed in 1983?

- a) Approximately 8.5 metres/ second
 - b) Approximately 8.5 seconds/ metre
 - c) Approximately 7.5 metres/ second
 - d) Approximately 7.5 seconds/ metre
-

Which of the following is in decreasing order:

- a) $2/7, 3/8, 4/9$
 - b) $3/8, 4/9, 2/7$
 - c) $2/7, 4/9, 3/8$
 - d) $4/9, 3/8, 2/7$
-

A car travelling at 70 km/hr stops after two and a half hours due to a breakdown. If the destination is 45 km away from this location, what is the distance between the starting point and the destination?

- a) 220 km
 - b) 210 km
 - c) 200 km
 - d) 160 km
-

Two people want to cross a wide river by walking through it. They see a sign board saying: "Average depth of this river is 4.5 feet." The two people are both 6 feet tall. Should they try to cross the river?

- a) Yes, because they are both quite tall
 - b) No, because they are not tall enough
 - c) Yes, because the river may be less deep than 4.5 feet in some parts
 - d) No, because the river may be more deep than 6 feet in some parts
-

Machine A takes 12 minutes to print 100 pages. Machine B is twice as efficient as Machine A. Then the time taken to print 200 pages is:

- a) 6 minutes
 - b) 12 minutes
 - c) 18 minutes
 - d) 24 minutes
-

The simple interest on a certain amount of money for 2 years at the rate of 8% per annum is Rs. 1600. What is the principal amount?

- a) Rs. 10000
 - b) Rs. 12000
 - c) Rs. 8000
 - d) Rs. 6000
-

Neeraj Chopra threw a javelin to a distance of 87.86 metres in his latest competition. The world record for javelin throws is about 112% of this distance. So, the world record is close to:

- a) 100 metres
 - b) 98.5 metres
 - c) 97 metres
 - d) 92.5 metres
-

If the speed of a bullet train is 240 km/hr then the (approximate) speed in meter/second is:

- a) 50
 - b) 67
 - c) 74
 - d) 93
-

A fruit seller sells bananas in dozens (bunches of 12 bananas) only. Aman's mother asks him to buy bananas for the guests who have come to their party. If there are 35 guests, then how many dozens of bananas should Aman buy?

- a) 5 dozens
 - b) 4 dozens
 - c) 3 dozens
 - d) 2 dozens
-

"A professor is not a machine." means the same as:

- a) Not all professors are machines.
 - b) No professors are machines.
 - c) Some professors are machines.
 - d) Some professors are not machines.
-

If A is necessary for B, it means that it is impossible for B to be true if A is not true. If A is sufficient for B, it means that A being true guarantees that B is true. Keeping this in mind -

A professor tells you that 'if you use Chat GPT then you'll fail the class'. Which of the following do they mean?

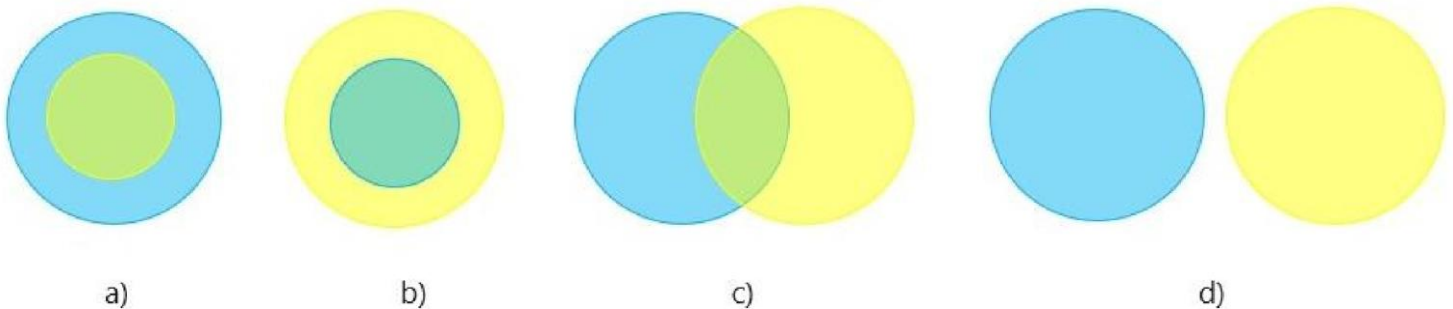
- a) Using Chat GPT is a necessary condition to fail the class.
 - b) Using Chat GPT is a sufficient condition to fail the class.
 - c) Using Chat GPT is both necessary and sufficient to fail the class.
 - d) Using Chat GPT is neither necessary nor sufficient condition to fail the class.
-

In a certain city, 65% of the households have internet access, 55% have a television, and 40% have a landline phone. Among the households with internet access, 75% also have a television, and among those with a television, 65% also have a landline phone.

Which of the following statements must be true?

- a) Some households have all three services (internet, television, and landline).
 - b) Every household in the city has at least one of these services.
 - c) More than 20% of the households have none of the three services.
 - d) Less than 40% of the households have two or more of these services.
-

Some things that can swim are fish, dolphins, and submarines. We'll use a blue circle to represent all things that can swim and a yellow circle to represent all aquatic animals.



Which of the following pictures best shows the relationship between these two circles?

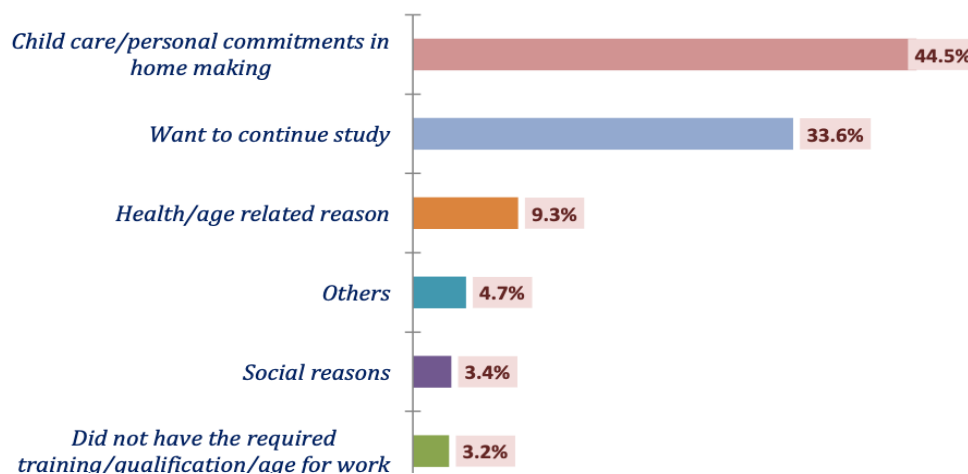
The Masons are a somewhat secretive group.

1. Every member of the Scottish Rite must be a Mason.
2. Every member of the York Rite must be a Mason.
3. It is possible to be a member of both the Scottish Rite and the York Rite.
4. Every Shriner must be a member of the Scottish Rite, the York Rite, or both.
5. Masons do not have to be members of the Shriners, or the Scottish Rite, or the York Rite.

Based on the above information, which of the following statements must be true?

- a) If someone is a Mason, they are also a Scottish Rite.
 - b) If someone is a Shriner and a York Rite, then they are also a Mason.
 - c) No one is a Shriner and a Scottish Rite.
 - d) Someone is a Shriner, Scottish Rite, York Rite, and a Mason.
-

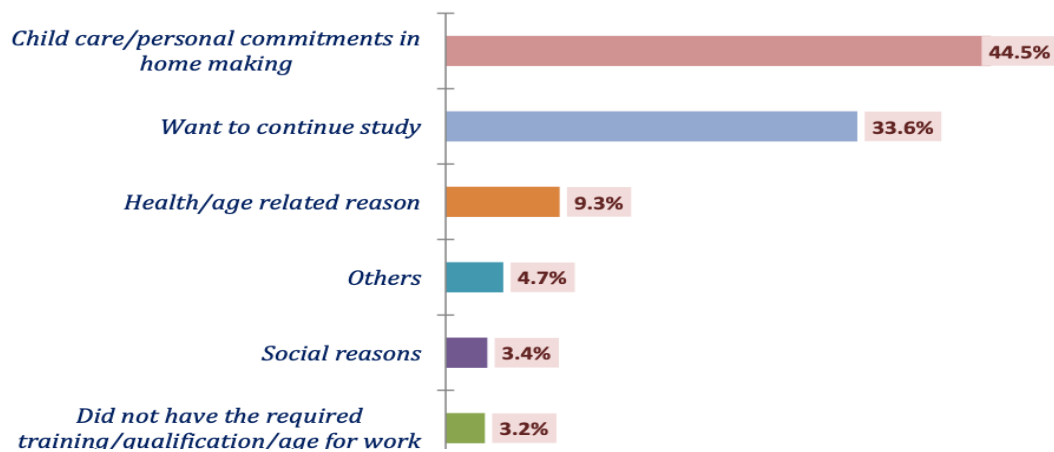
The following graph shows the percentage contributions of different reasons why women do not participate in the labor force, calculated from a survey of 20,000 women.



What is the approximate number of women who do not participate because they want to continue education?

- a) 10000
 - b) 2000
 - c) 6700
 - d) 0
-

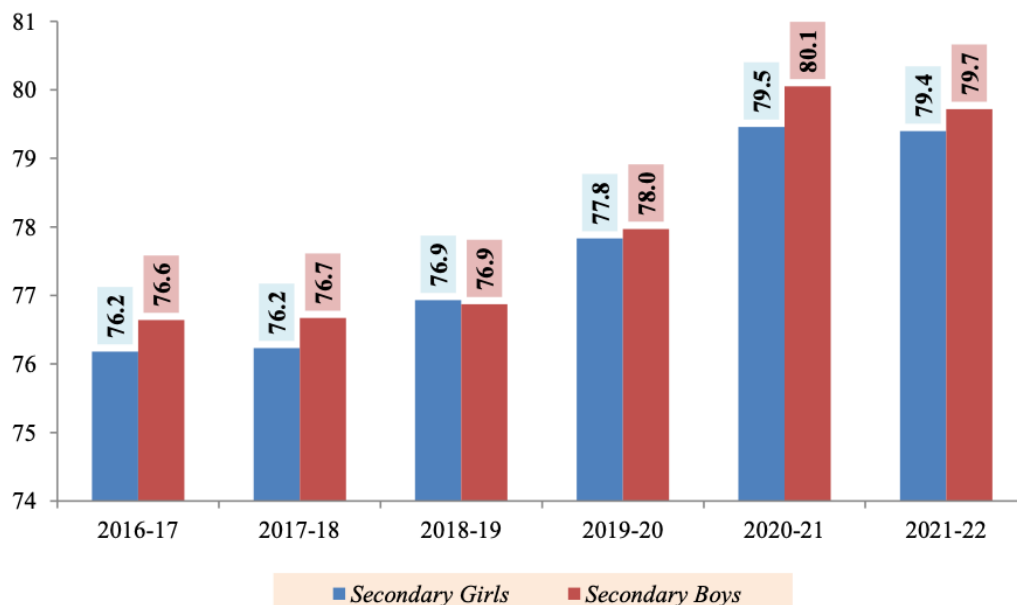
The following graph shows the percentage contributions of different reasons why women do not participate in the labor force, calculated from a survey of 20,000 women.



What is the reason reported by most of the women for not being in the labor force?

- a) Want to continue study
- b) Social reasons
- c) Health/Age related reasons
- d) None of the above

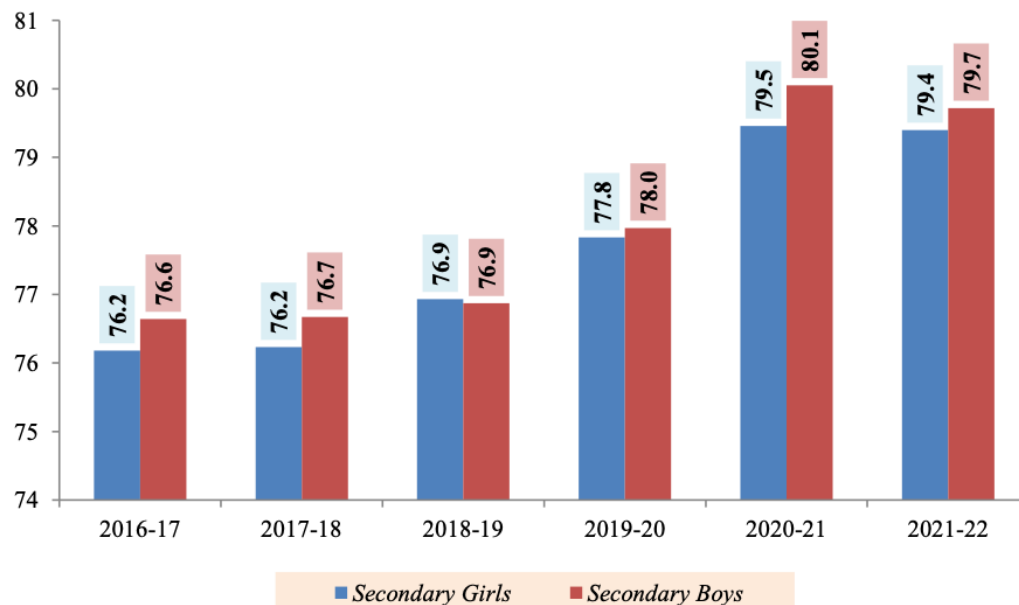
The following graph shows the gross enrollment percentage of boys and girls in secondary education for six years in India.



In which year is the difference between girls and boys gross enrollment in secondary education the highest?

- a) 2016-17
 - b) 2021-22
 - c) 2019-20
 - d) 2020-21
-

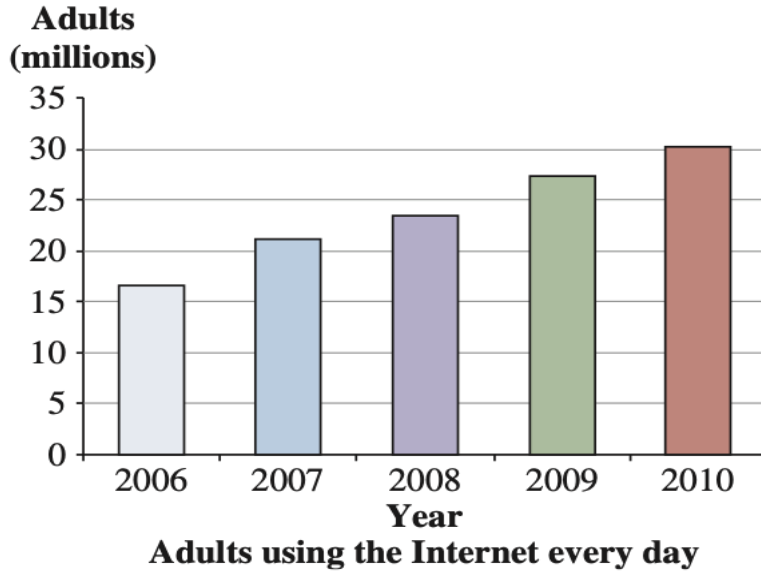
The following graph shows the gross enrollment percentage of boys and girls in secondary education for six years in India.



In which year is the difference between girls and boys gross enrollment in secondary education the lowest?

- a) 2016-17
 - b) 2017-18
 - c) 2018-19
 - d) 2019-20
-

The following graph shows the number of adults using the Internet everyday in a certain country.



Which of the following statements is true?

- a) In 2007, between 25 to 30 million adults used the internet everyday.
 - b) In 2006, between 15 to 20 thousand adults used the internet everyday.
 - c) In 2010, around 30 million adults used the internet everyday.
 - d) In 2009, around 20 million more adults used the internet compared to 2008.
-

A cricket team won 7 matches out of the total number of matches they played. If the win percentage is 20, then the number of matches they lost in all is

- a) 15
 - b) 14
 - c) 28
 - d) 21
-

The ratio of the sides of two squares is 3:5. If the length of the first square is 18 cm, then what is the area of the second square (in square cm)?

- a) 225
 - b) 400
 - c) 625
 - d) 900
-

How many square tiles of side 2 units fit onto a rectangular floor of length 9 units and breadth 4 units?

- a) 10 squares

- b) 9 squares
 - c) 8 squares
 - d) 7 squares
-

Which of the following is in the increasing order?

- a) $-\frac{3}{5}, -\frac{5}{8}, -\frac{7}{11}$
 - b) $-\frac{5}{8}, -\frac{7}{11}, -\frac{3}{5}$
 - c) $-\frac{7}{11}, -\frac{5}{8}, -\frac{3}{5}$
 - d) $-\frac{7}{11}, -\frac{3}{5}, -\frac{5}{8}$
-

What percentage of 10 years is 1 month?

- a) More than 10%
 - b) More than 5% but less than 10%
 - c) More than 1% but less than 5%
 - d) Less than 1%
-

The distance from Bengaluru to Hyderabad is approximately 575 km and it takes a bus about 9 hours and 20 mins to cover this distance. If the bus goes at the same speed, how many hours will it take to get from Bengaluru to Solapur which is 620 km away?

- a) 10 hours
 - b) A little less than 10 hours
 - c) A little more than 10 hours
 - d) 11 hours
-

Which of the following is the correct way to calculate the percentage of profit?

- a) $(\text{Cost}/\text{Profit}) \times 100$
 - b) $(\text{Selling Price} - \text{Cost Price}) \times 100$
 - c) $(\text{Cost Price} - \text{Selling Price}) \times 100$
 - d) $(\text{Profit}/\text{Cost}) \times 100$
-

If 150 pencils cost 240 rupees, what will be the cost of 200 pencils?

- a) 300 rupees
 - b) 320 rupees
 - c) 340 rupees
 - d) 200 rupees
-

Average typing speed is 40 words per minute (wpm). If you want to be really good at typing you should aim for 60-70 wpm typing speed. If a person can type 70 wpm, how much faster will that person be than the average person in typing?

- a) 30% faster
 - b) 3 times better
 - c) 1.75 times faster
 - d) 150 % faster
-

The average height of 3 brothers is 160 cm. One of the brother's height is equal to the average. Which of the following is possible regarding the other two brothers?

- a) One brother is 165 cm and the other is 155 cm
 - b) One brother is 166 cm and the other brother is 155 cm
 - c) One brother is 167 cm and the other brother is 155 cm
 - d) Both brothers are 164 cm
-

"A mammal is not a fish." means the same as:

- a) Not all mammals are fish.
 - b) Some mammals are fish.
 - c) No mammals are fish.
 - d) Some mammals are not fish.
-

If A is necessary for B, it means that it is impossible for B to be true if A is not true. If A is sufficient for B, it means that A being true guarantees that B is true. Keeping this in mind - A politician tells you that 'If you are not a citizen then you cannot vote in the election'. Do they mean.

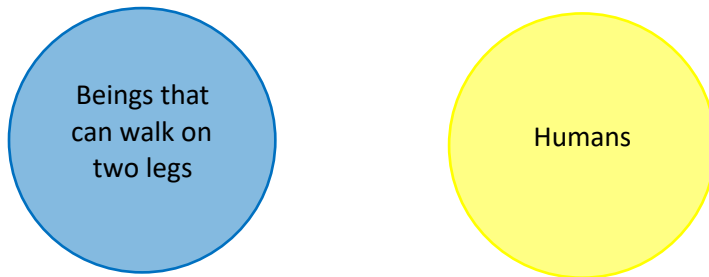
- a) Being a citizen is a necessary condition to vote in the election.
 - b) Being a citizen is a sufficient condition to vote in the election.
 - c) Being a citizen is both necessary and sufficient to vote in the election.
 - d) Being a citizen is neither necessary nor sufficient to vote in the election.
-

In a certain school, 70% of the students participate in sports, 50% are involved in music, and 30% are part of the drama club. Among the students who participate in sports, 60% are also involved in music, and among those involved in music, 50% are also part of the drama club. Which of the following statements must be true?

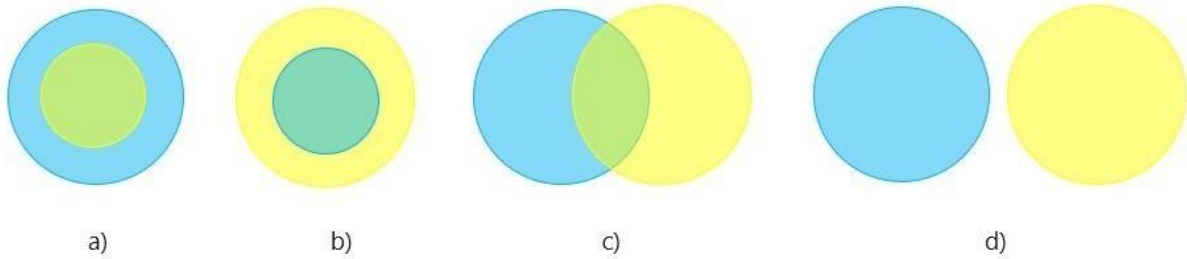
- a) Every student in the school participates in at least one of these activities.
- b) Some students are involved in all three activities (sports, music, and drama).
- c) More than 20% of the students do not participate in any of the three activities.

d) Less than 30% of the students are involved in two or more of these activities.

Some beings that can walk on two legs are bears, humans, and monkeys. But some humans (for example, toddlers) cannot walk on two legs. We'll use a blue circle to represent all beings that can walk on two legs and a yellow circle to represent all humans.



Which of the following pictures best shows the relationship between these two circles?



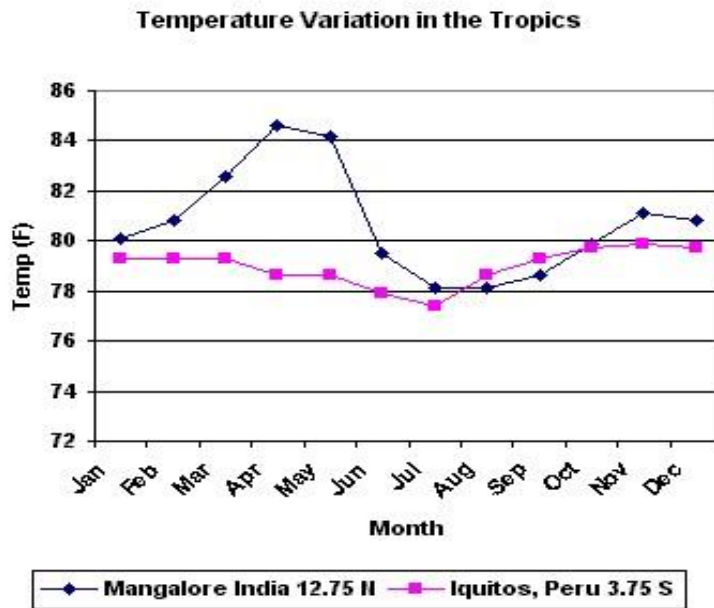
In a certain Organization, the following rules apply:

1. Every member of the Executive Committee must be a member of the Organization.
2. Every member of the Advisory Board must be a member of the Organization.
3. It is possible to be a member of both the Executive Committee and the Advisory Board.
4. Every Volunteer must be a member of the Executive Committee, the Advisory Board, or both.
5. Members of the Organization do not have to be members of the Volunteers, Executive Committee, or Advisory Board.

Based on the above information, which of the following statements must be true?

- a) If someone is a member of the Organization, they are also a member of the Executive Committee.
 - b) No one is a Volunteer and a member of the Executive Committee.
 - c) Someone is a Volunteer, a member of the Executive Committee, a member of the Advisory Board, and a member of the Organization.
 - d) If someone is a Volunteer, then they are also a member of the Organization.
-

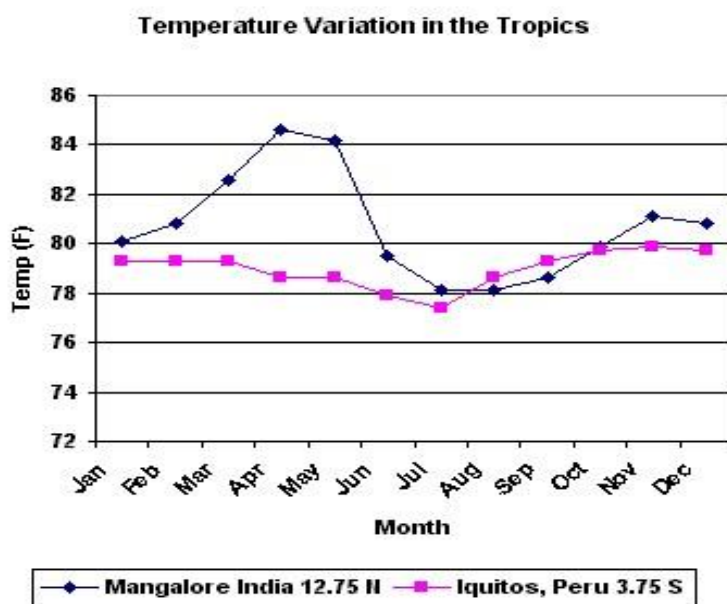
The following graph shows the temperature variation between Mangalore (India) and Iquitos (Peru) over each month of a particular year.



Which month records the highest temperature for Mangalore?

- a) July
- b) May
- c) April
- d) December

The following graph shows the temperature variation between Mangalore (India) and Iquitos (Peru) over each month of a particular year.

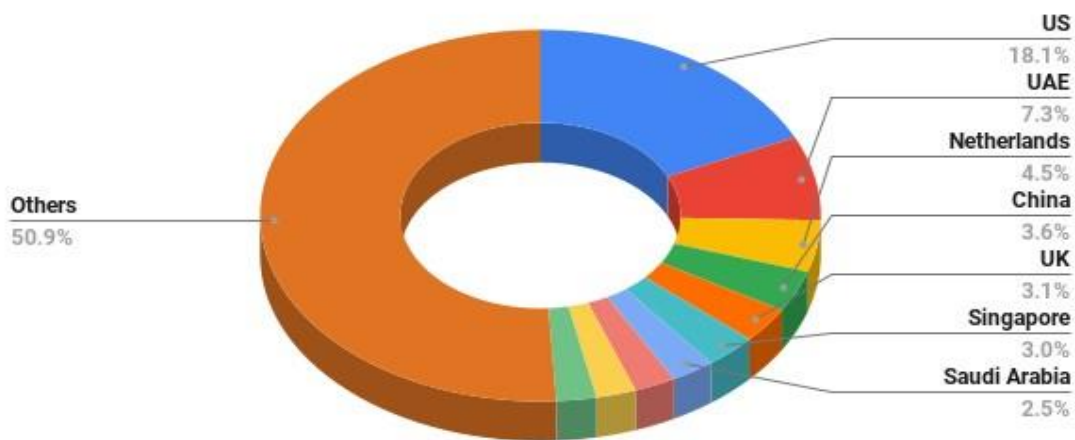


Which month records the lowest temperature for Iquitos?

- a) July
 - b) August
 - c) September
 - d) October
-

The following graph shows destination-wise share of other countries in India's merchandise exports in a particular year.

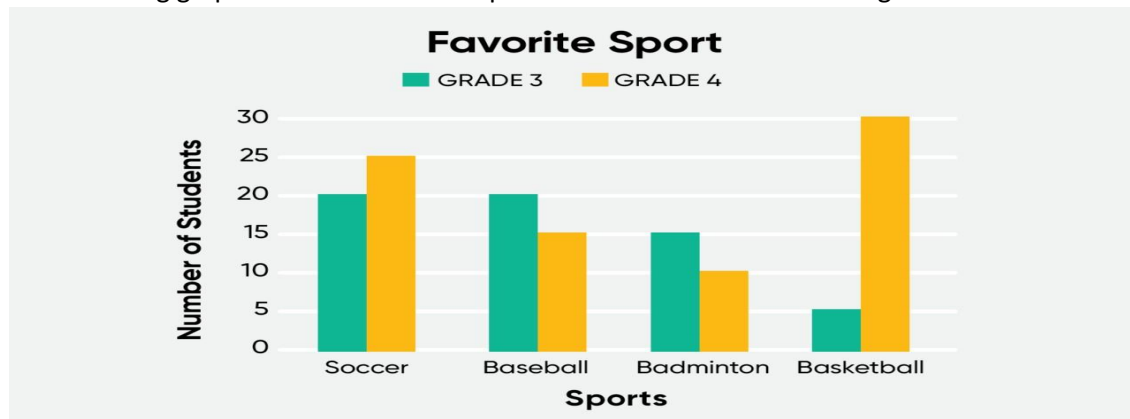
Destination-wise share in India's merchandise exports



Which countries contribute the largest and second largest shares in India's merchandise exports?

- a) US and Netherlands
 - b) Netherlands and China
 - c) US and UAE
 - d) UAE and Netherlands
-

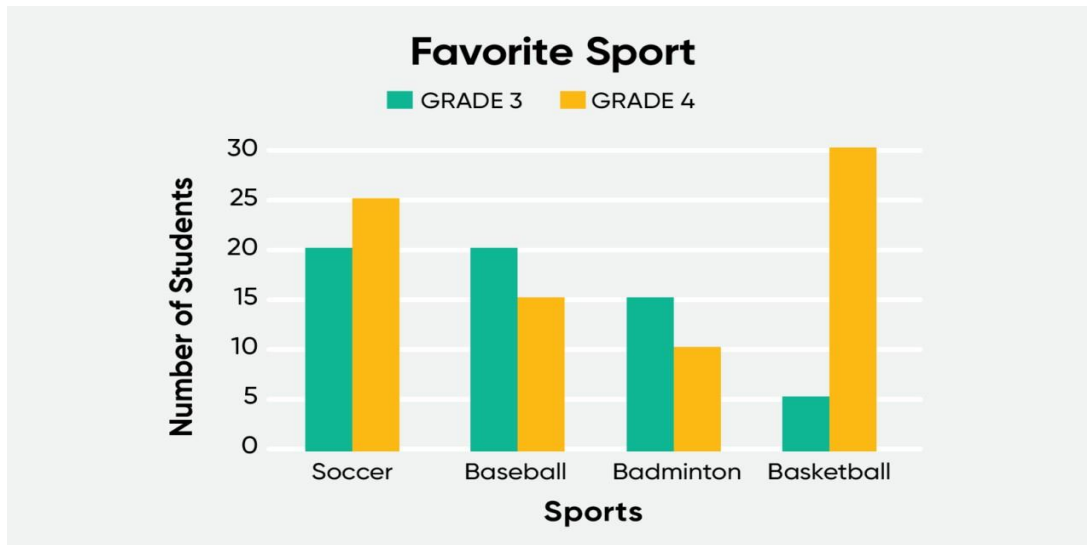
The following graph shows the favorite sport of students in two different grades in a school.



What is the difference between the total number of students in grade 3 and grade 4 whose favorite sport is basketball?

- a) 10
 - b) 30
 - c) 25
 - d) 15
-

The following graph shows the favorite sport of students in two different grades in a school.



Which of the following statements is true?

- a) Soccer is the favourite sport for most of the students in grade 3
 - b) Baseball is the favourite sport for most of the students in grade 3
 - c) Soccer is the favourite sport for most of the students in grade 4
 - d) Basketball is the favourite sport for most of the students in grade 4
-